

PART 4 - GENERAL MORTALITY STATISTICS

Chart 4.1

Mortality Rates, Leading Causes: Ages 1 to 14 Years

The two leading causes of death for American Indians and Alaska Natives ages 1 to 14 (1990–1992) were accidents and congenital anomalies. For the U.S. All Races and White populations (1991), they were accidents and malignant neoplasms.

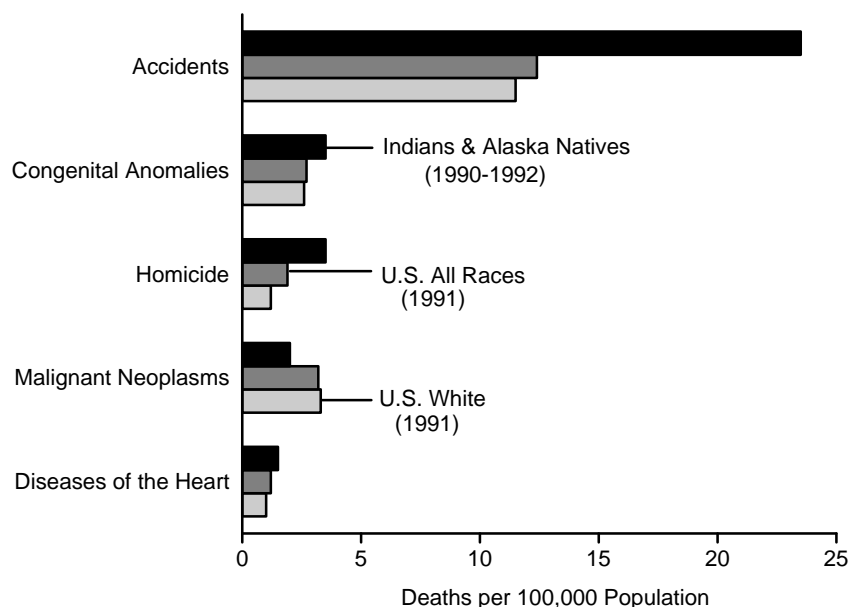


Table 4.1

Ten Leading Causes of Death for Decedents 1 to 14 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1990–1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	520	45.0	30.9	28.0	1.5	1.6
Accidents	271	23.5	12.4	11.5	1.9	2.0
Motor vehicle	128	11.1	5.7	5.6	1.9	2.0
Other accidents	143	12.4	6.7	6.0	1.9	2.1
Congenital anomalies	40	3.5	2.7	2.6	1.3	1.3
Homicide	40	3.5	1.9	1.2	1.8	2.9
Malignant neoplasms	23	2.0	3.2	3.3	0.6	0.6
Diseases of the heart	17	1.5	1.2	1.0	1.3	1.5
Pneumonia and influenza	13	1.1	0.7	0.6	1.6	1.8
Suicide	12	1.0	0.5	0.6	2.0	1.7
Certain conditions originating in the perinatal period, 760-779	6	0.5	0.3	0.3	1.7	1.7
Meningitis, 320-322	5	0.4	0.1	0.1	4.0	4.0
Septicemia, 038	3	0.3	0.3	0.2	1.0	1.5
All other causes	90					

NOTE: For ICD-9 codes utilized and not shown above, refer to Tables 4.6 and 4.7.

Chart 4.2
Mortality Rates, Leading Causes: Ages 15 to 24 Years

The two leading causes of death for American Indians and Alaska Natives ages 15 to 24 years (1990-1992) and U.S. Whites (1991) were accidents and suicide. For the U.S. All Races (1991), they were accidents and homicide.

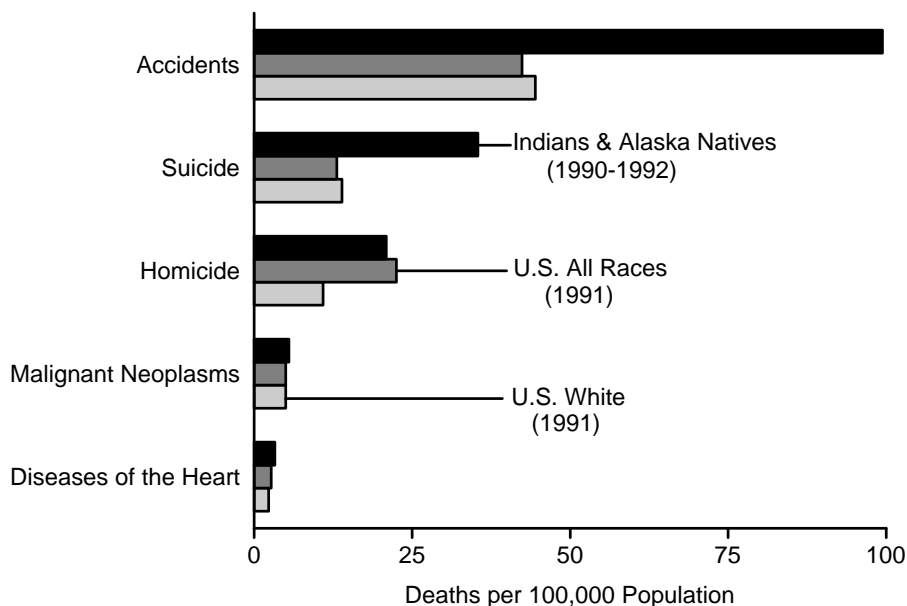


Table 4.2
Ten Leading Causes of Death for Decedents 15 to 24 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1990-1992 and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	1,241	188.3	100.8	89.2	1.9	2.1
Accidents	655	99.4	42.4	44.5	2.3	2.2
Motor vehicle	466	70.7	32.3	34.6	2.2	2.0
Other accidents	189	28.7	10.1	9.8	2.8	2.9
Suicide	233	35.4	13.1	13.9	2.7	2.5
Homicide	138	20.9	22.5	10.9	0.9	1.9
Malignant neoplasms	36	5.5	5.0	5.0	1.1	1.1
Diseases of the heart	22	3.3	2.7	2.3	1.2	1.4
Pneumonia and influenza	10	1.5	0.7	0.6	2.1	2.5
Chronic liver disease and cirrhosis	7	1.1	0.1	0.1	11.0	11.0
Complications of pregnancy, childbirth and the puerperium, 630-676	6	0.9	0.3	0.2	3.0	4.5
Congenital anomalies, 740-759	6	0.9	1.2	1.2	0.8	0.8
Cerebrovascular diseases	5	0.8	0.6	0.6	1.3	1.3
All other causes	123					

NOTE: For ICD-9 codes utilized and not shown above, refer to Tables 4.6 and 4.7.

Chart 4.3
Mortality Rates, Leading Causes: Ages 25 to 44 Years

The two leading causes of death for American Indians and Alaska Natives ages 25 to 44 years (1990-1992) were accidents and chronic liver disease and cirrhosis. For the U.S. All Races and White populations (1991), they were accidents and malignant neoplasms. The third leading cause for U.S. All Races and Whites was human immunodeficiency virus (HIV) infection, while it was eighth for Indians.

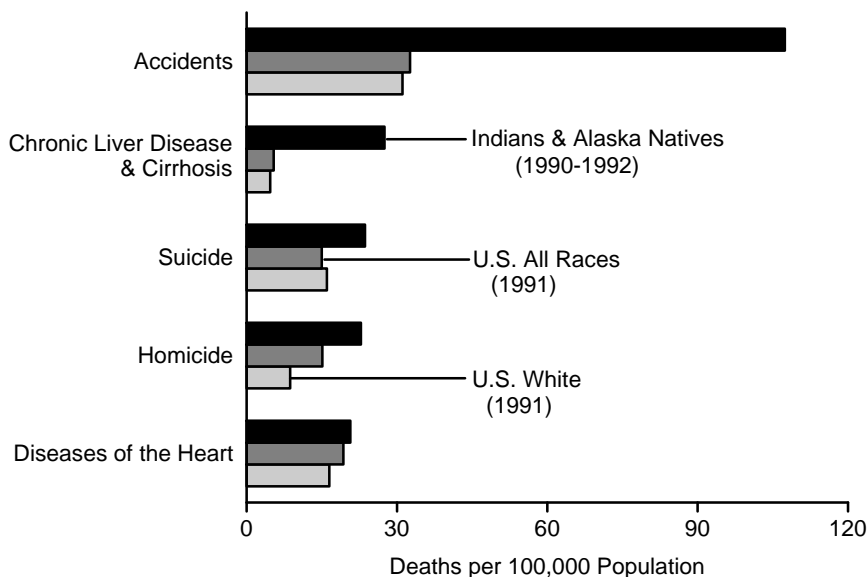


Table 4.3
Ten Leading Causes of Death for Decedents 25 to 44 Years of Age

American Indians and Alaska Natives, IHS Service Area, 1990-1992 and U.S. All Races and White Populations, 1991

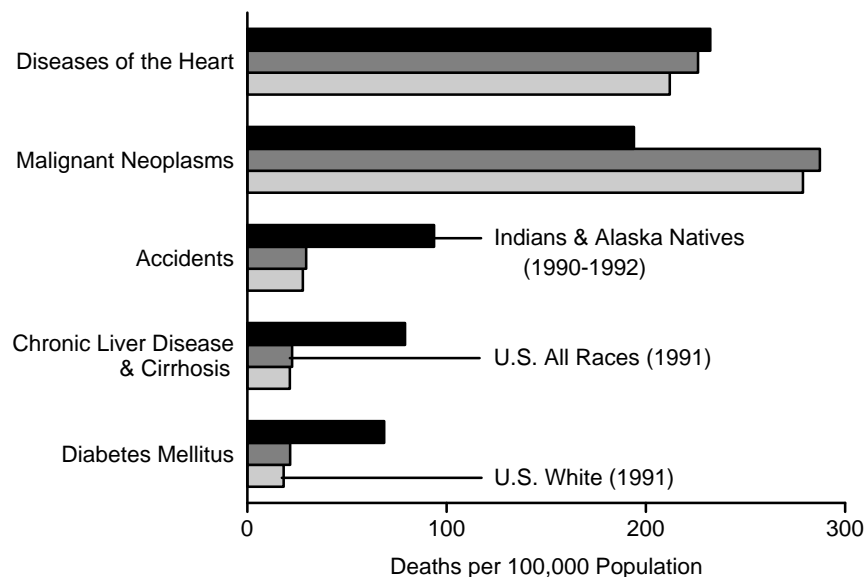
Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	3,267	297.4	180.5	155.7	1.6	1.9
Accidents	1,180	107.4	32.6	31.1	3.3	3.5
Motor vehicle	699	63.6	18.5	18.2	3.4	3.5
Other accidents	481	43.8	14.1	12.9	3.1	3.4
Chronic liver disease and cirrhosis	302	27.5	5.4	4.7	5.1	5.9
Suicide	259	23.6	15.0	16.0	1.6	1.5
Homicide	250	22.8	15.1	8.7	1.5	2.6
Diseases of the heart	227	20.7	19.3	16.5	1.1	1.3
Malignant neoplasms	202	18.4	27.2	25.9	0.7	0.7
Pneumonia and influenza	63	5.7	2.7	2.0	2.1	2.9
Human immunodeficiency virus (HIV) infection, 042-044	58	5.3	26.5	21.2	0.2	0.3
Cerebrovascular diseases	55	5.0	4.1	3.1	1.2	1.6
Diabetes mellitus	44	4.0	2.7	2.4	1.5	1.7
All other causes	658					

NOTE: For ICD-9 codes utilized and not shown above, refer to Tables 4.6 and 4.7.

Chart 4.4***Mortality Rates, Leading Causes: Ages 45 to 64 Years***

The two leading causes of death for American Indians and Alaska Natives, ages 45 to 64 years (1990-1992), were diseases of the heart and malignant neoplasms. This ranking was in reverse order for the U.S. All Races and White populations (1991).

**Table 4.4*****Ten Leading Causes of Death for Decedents 45 to 64 Years of Age***

American Indians and Alaska Natives, IHS Service Area, 1990-1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Cause of Death	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	4,680	942.9	790.8	740.7	1.2	1.3
Diseases of the heart	1,153	232.3	226.2	212.0	1.0	1.1
Malignant neoplasms	963	194.0	287.3	278.8	0.7	0.7
Accidents	465	93.7	29.5	27.9	3.2	3.4
Motor vehicle	251	50.6	14.3	13.8	3.5	3.7
Other accidents	214	43.1	15.3	14.0	2.8	3.1
Chronic liver disease and cirrhosis	393	79.2	22.5	21.3	3.5	3.7
Diabetes mellitus	341	68.7	21.5	18.2	3.2	3.8
Cerebrovascular diseases	157	31.6	31.1	25.5	1.0	1.2
Pneumonia and influenza	116	23.4	11.7	10.3	2.0	2.3
Chronic obstructive pulmonary diseases and allied cond.	86	17.3	27.3	27.7	0.6	0.6
Nephritis, nephrotic syndrome, and nephrosis	66	13.3	5.1	3.9	2.6	3.4
Homicide	60	12.1	7.0	5.0	1.7	2.4
All other causes	880					

NOTE: For ICD-9 codes utilized refer to Tables 4.6 and 4.7.

Chart 4.5
Mortality Rates, Leading Causes: Ages 65+ Years

The two leading causes of death for American Indians and Alaska Natives, ages 65 and over (1990–1992), were diseases of the heart and malignant neoplasms. For the U.S. All Races and White populations (1991), they were also diseases of the heart and malignant neoplasms.

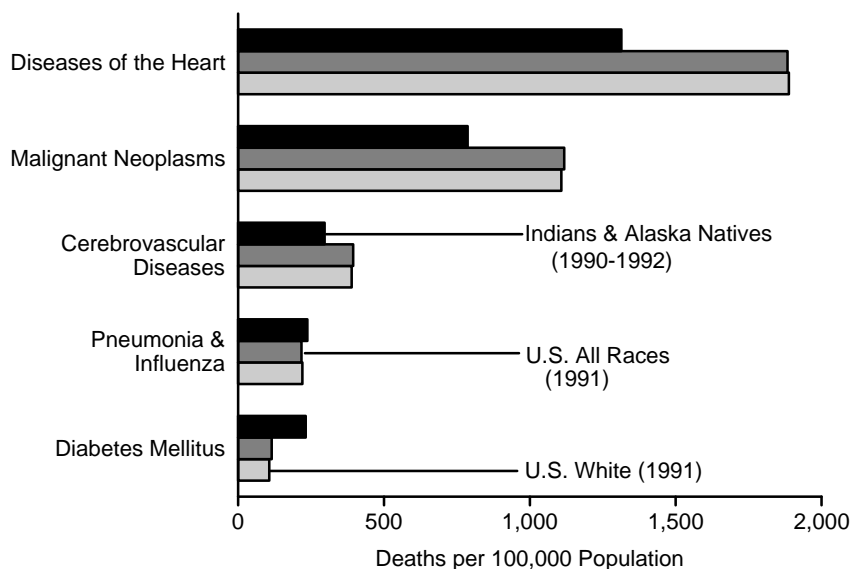


Table 4.5
Ten Leading Causes of Death for Decedents 65 Years Old and Older

American Indians and Alaska Natives, IHS Service Area, 1990–1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	American Indian and Alaska Native		U.S. All Races Rate	U.S. White Rate	Ratio American Indian and Alaska Native to:	
	Number	Rate			U.S. All Races	U.S. White
All Causes	8,761	4,102.0	4,929.3	4,915.0	0.8	0.8
Diseases of the heart	2,806	1,313.8	1,883.7	1,888.3	0.7	0.7
Malignant neoplasms	1,680	786.6	1,117.9	1,107.9	0.7	0.7
Cerebrovascular diseases	633	296.4	394.6	389.0	0.8	0.8
Pneumonia and influenza	507	237.4	217.3	220.5	1.1	1.1
Diabetes mellitus	495	231.8	115.1	106.9	2.0	2.2
Chronic obstructive pulmonary diseases and allied cond.	339	158.7	240.8	251.8	0.7	0.6
Accidents	303	141.9	83.6	83.2	1.7	1.7
Motor vehicle	91	42.6	22.4	22.5	1.9	1.9
Other accidents	212	99.3	61.2	60.7	1.6	1.6
Nephritis, nephrotic syndrome, and nephrosis	185	86.6	56.6	52.6	1.5	1.6
Chronic liver disease and cirrhosis	152	71.2	32.8	33.2	2.2	2.1
Septicemia, 038	127	59.5	50.1	46.8	1.2	1.3
All other causes	1,534					

NOTE: For ICD-9 codes utilized and not shown above, refer to Tables 4.6 and 4.7.

Chart 4.6
Mortality Rates for Leading Causes, Indians and Alaska Natives (1990–1992)

The leading cause of death for American Indians and Alaska Natives (1990–1992) and the U.S. All Races and White populations (1991) was diseases of the heart. The second leading cause for Indians was accidents in contrast to malignant neoplasms for U.S. All Races and Whites.

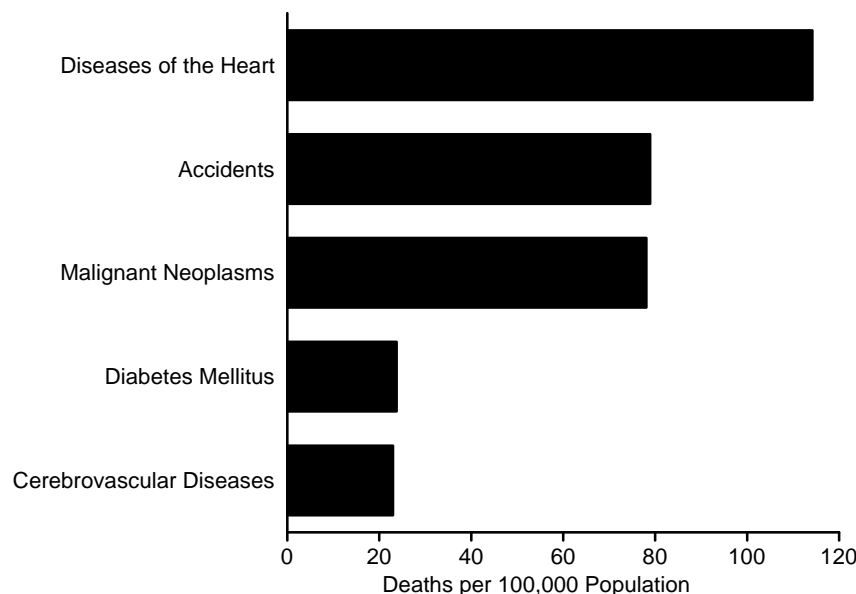


Table 4.6
Ten Leading Causes of Death for Decedents of All Ages

American Indians and Alaska Natives, IHS Service Area, 1990–1992

Rate per 100,000 Population

Cause of Death and ICD-9 Code(s)	Number	Rate
All Causes	19,429	522.2
Diseases of the heart, 390–398, 402, 404–429	4,249	114.2
Accidents, E800–E949	2,935	78.9
Motor vehicle, E810–E825	1,644	44.2
Other accidents, E800–E807, E826–E949	1,291	34.7
Malignant neoplasms, 140–208	2,906	78.1
Diabetes mellitus, 250	884	23.8
Cerebrovascular diseases, 430–438	857	23.0
Chronic liver disease and cirrhosis, 571	854	23.0
Pneumonia and influenza, 480–487	737	19.8
Suicide, E950–E959	572	15.4
Homicide and legal intervention, E960–E978	520	14.0
Chronic obstructive pulmonary diseases, 490–496	446	12.0
All other causes	4,469	

Chart 4.7

Mortality Rates for Leading Causes: Males, Indians and Alaska Natives (1990–1992)

The two leading causes of death for Indian males (1990–1992) were diseases of the heart and accidents. For U.S. All Races and White males (1991), they were diseases of the heart and malignant neoplasms.

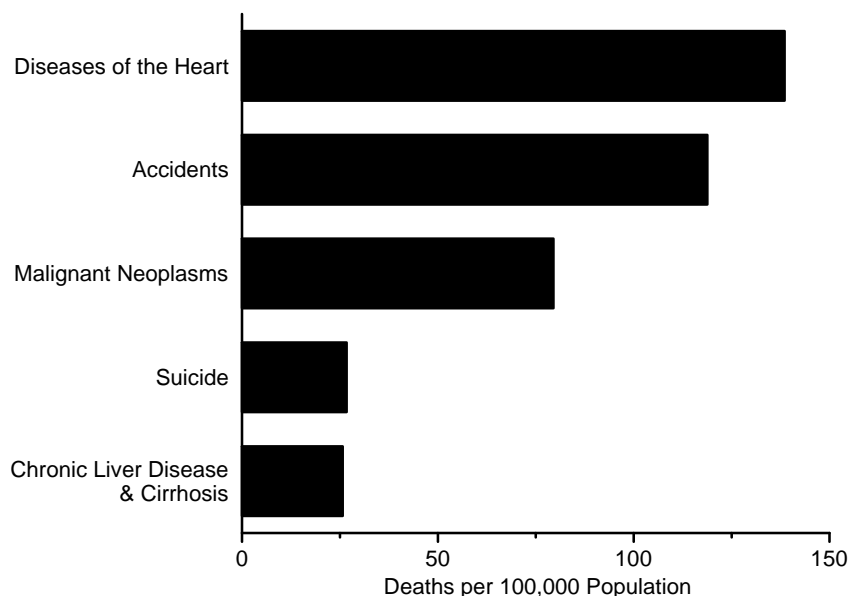


Chart 4.8

Mortality Rate for Leading Causes: Females, Indians and Alaska Natives (1990–1992)

The two leading causes of death for Indian females (1990–1992) were diseases of the heart and malignant neoplasms. The same was true for U.S. All Races and White females in 1991.

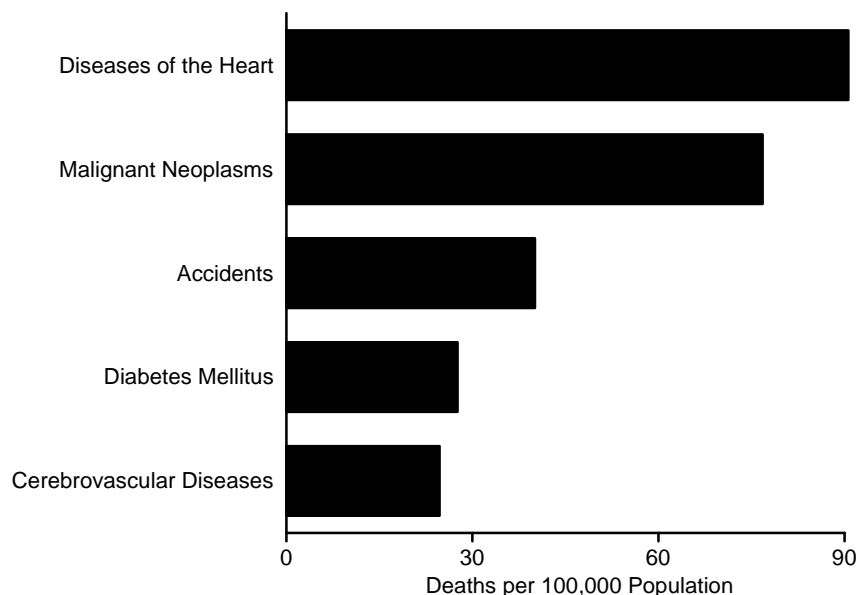


Table 4.7
Leading Causes of Death by Sex

American Indians and Alaska
Natives, IHS Service Area,
1990–1992

Rate per 100,000 Population

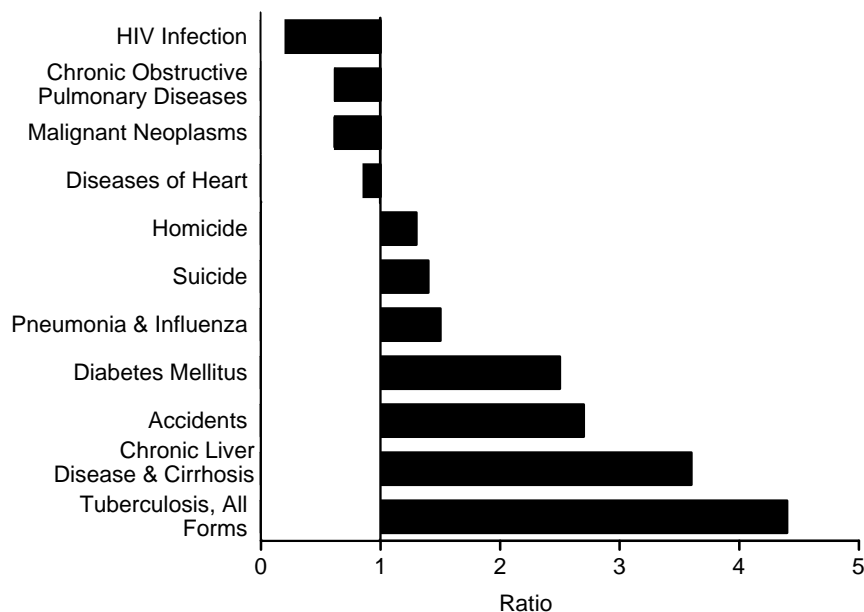
Male			
Cause of Death and ICD-9 Code(s)	Number	Rate	
All Causes	11,359	620.0	
Diseases of the heart, 390–398, 402, 404–429	2,537	138.5	
Accidents, E800–E949	2,177	118.8	
Motor vehicle, E810–E825	1,174	64.1	
Other accidents, E800–E807, E826–E949	1,003	54.8	
Malignant neoplasms, 140–208	1,456	79.5	
Suicide, E950–E959	490	26.7	
Chronic liver disease and cirrhosis, 571	471	25.7	
Pneumonia and influenza, 480–487	413	22.5	
Homicide and legal intervention, E960–E978	403	22.0	
Cerebrovascular diseases, 430–438	391	21.3	
Diabetes mellitus, 250	363	19.8	
Chronic obstructive pulmonary diseases and allied conditions, 490–496	252	13.8	
All other causes	2,406		

Female			
Cause of Death and ICD-9 Code(s)	Number	Rate	
All Causes	8,070	427.2	
Diseases of the heart, 390–398, 402, 404–429	1,712	90.6	
Malignant neoplasms, 140–208	1,450	76.8	
Accidents, E800–E949	758	40.1	
Motor vehicle, E810–E825	470	24.9	
Other accidents, E800–E807, E826–E949	288	15.2	
Diabetes mellitus, 250	521	27.6	
Cerebrovascular diseases, 430–438	466	24.7	
Chronic liver disease and cirrhosis, 571	383	20.3	
Pneumonia and influenza, 480–487	324	17.2	
Chronic obstructive pulmonary diseases and allied conditions, 490–496	194	10.3	
Congenital anomalies, 740-759	141	7.5	
Nephritis, nephrotic syndrome, and nephrosis, 580–589	140	7.4	
All other causes	1,981		

Chart 4.9

Selected Age-Adjusted Death Rates, Ratio of Indians (1990-1992) to U.S. All Races (1991)

The American Indian and Alaska Native age-adjusted mortality rates for 1990-1992 were above those of the U.S. All Races (1991) for tuberculosis, chronic liver disease and cirrhosis, accidents, diabetes mellitus, pneumonia and influenza, suicide, and homicide. Indian rates were below those of the U.S. All Races for HIV infection, chronic obstructive pulmonary diseases, malignant neoplasms, and diseases of the heart.

**Table 4.9**

Age-Adjusted Mortality Rates

American Indians and Alaska Natives, IHS Service Area, 1990-1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Cause of Death	Indian and Alaska Native	United States			Ratio American Indian and Alaska Native to:	
		All Races	White	All Other	U.S. All Races	U.S. White
All Causes	598.1	513.7	486.8	672.8	1.2	1.2
Major cardiovascular diseases	163.2	185.0	177.2	237.0	0.9	0.9
Diseases of heart	131.3	148.2	143.1	182.2	0.9	0.9
Cerebrovascular diseases	24.9	26.8	24.7	41.7	0.9	1.0
Atherosclerosis	2.0	2.6	2.6	2.5	0.8	0.8
Hypertension	1.7	1.9	1.5	5.2	0.9	1.1
Accidents	83.2	31.0	30.3	35.3	2.7	2.7
Motor vehicle	47.5	17.0	17.2	16.3	2.8	2.8
All other	37.6	13.9	13.0	19.0	2.7	2.9
Malignant neoplasms	96.1	134.5	131.3	156.7	0.7	0.7
Chronic liver disease and cirrhosis	29.5	8.3	7.8	10.7	3.6	3.8
Diabetes mellitus	30.0	11.8	10.5	21.7	2.5	2.9
Pneumonia and influenza	19.7	13.4	12.8	16.8	1.5	1.5
Suicide	16.2	11.4	12.1	6.9	1.4	1.3
Homicide	14.6	10.9	6.2	33.3	1.3	2.4
Chronic obstructive pulmonary diseases and allied conditions	13.5	20.1	20.6	15.2	0.7	0.7
Tuberculosis, all forms	2.2	0.5	0.3	1.8	4.4	7.3
Human immunodeficiency virus (HIV) infection, 042-044	2.2	11.7	9.4	23.5	0.2	0.2

SOURCE: U.S. Mortality Rates: Monthly Vital Statistics Report, NCHS, DHHS Pub. No. (PHS)93-1120, Vol. 42, No. 2, Supplement, August 31, 1993, Table 11

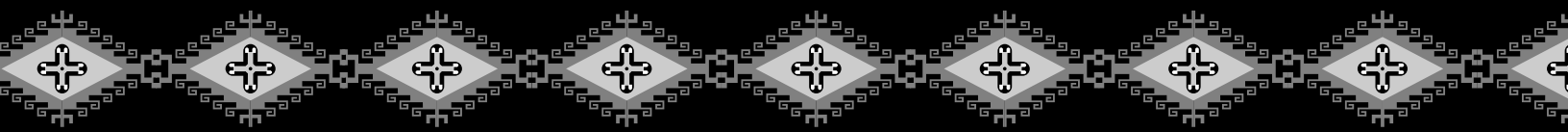


Chart 4.10
*Age-Specific Death Rates,
Ratio of Indians and Alaska
Natives (1990–1992) to U.S.
All Races (1991)*

The age-specific death rate for American Indians and Alaska Natives (1990-1992) was 1.4 or more times the U.S. All Races rate (1991) for age groups 1 through 54. The Indian rate was less than the U.S. All Races rate for age groups over 64.

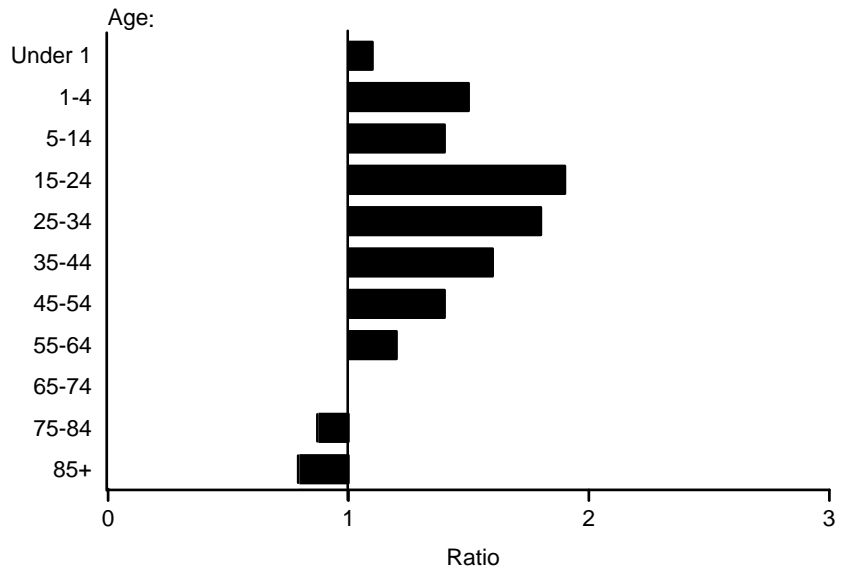


Chart 4.11
*Age-Specific Death Rates,
Ratio of Indians and Alaska
Natives (1990–1992) to U.S.
White (1991)*

The age-specific death rate for American Indians and Alaska Natives (1990-1992) was about double the U.S. White rate (1991) for age groups 15 through 44. The Indian rate was less than the U.S. White rate for age groups over 74.

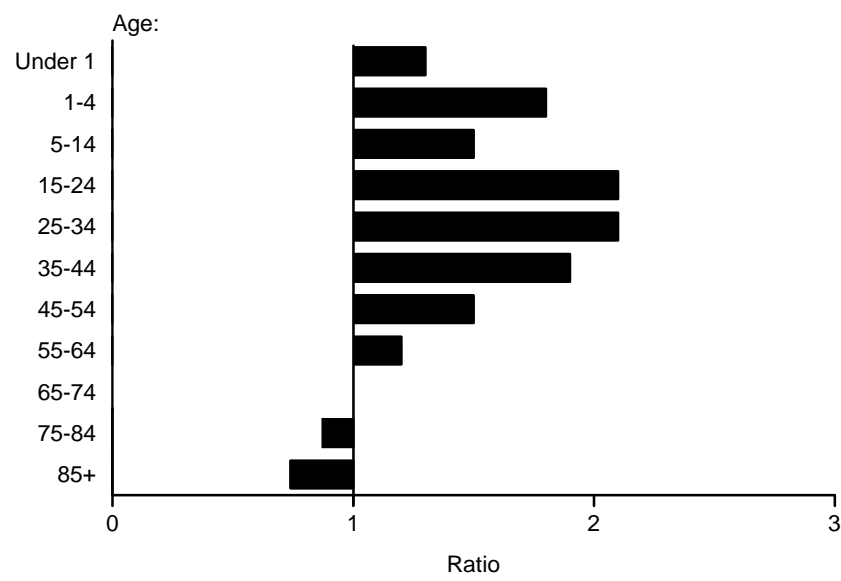


Table 4.10
Age-Specific Mortality Rates

American Indians and Alaska
Natives, IHS Service Area,
1990–1992, and Selected U.S.
Populations, 1991

Rate per 100,000 Population

Age Group	Indian and Alaska Native		U.S. Rate			Ratio American Indian and Alaska Native to:	
	Number	Rate	All Races	White	All Other	U.S. All Races	U.S. White
Under 1	956	974.4	916.6	762.6	1,442.1	1.1	1.3
1–4	257	73.0	47.4	41.7	69.5	1.5	1.8
5–14	263	32.7	23.6	22.0	30.2	1.4	1.5
15–24	1,241	188.3	100.1	88.5	149.1	1.9	2.1
25–34	1,563	248.9	139.1	119.4	233.1	1.8	2.1
35–44	1,704	362.1	224.4	193.2	391.3	1.6	1.9
45–54	1,897	646.0	468.8	423.6	744.4	1.4	1.5
55–64	2,783	1,372.9	1,181.0	1,118.8	1,610.9	1.2	1.2
65–74	3,445	2,610.5	2,618.5	2,545.1	3,233.0	1.0	1.0
75–84	3,232	5,067.2	5,890.0	5,842.4	6,361.2	0.9	0.9
85+	2,084	11,681.0	15,107.6	15,345.3	13,724.1	0.8	0.8

SOURCE: U.S. Data by Race: National Center for Health Statistics, HHS, Monthly Vital Statistics Report, Vol. 42, No. 2, Tables 2 and 8

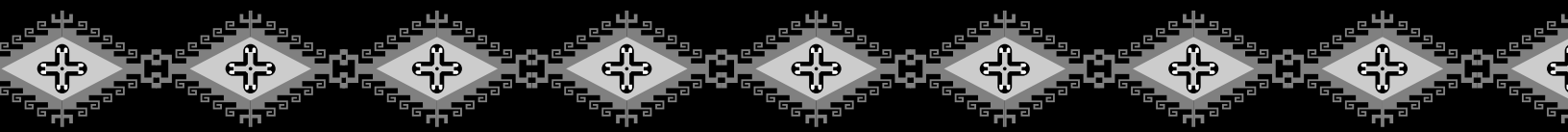


Chart 4.12
Deaths by Age

Of all American Indian and Alaska Native people who died during 1990–1992, 31 percent were under 45 years of age. This compared to 11 percent for the U.S. All Races population (1991).

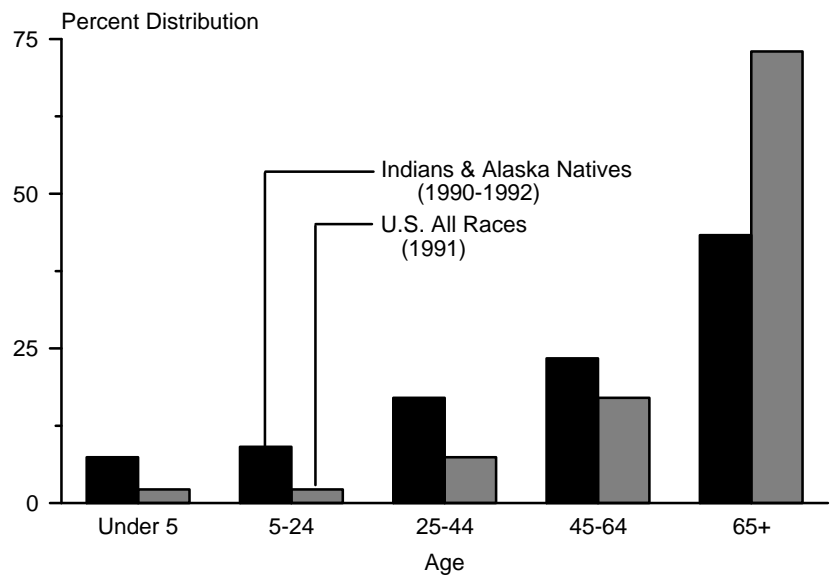


Chart 4.13
Deaths by Age and Race

23 percent of Black decedents and 9 percent of White decedents in 1991 were under 45 years of age.

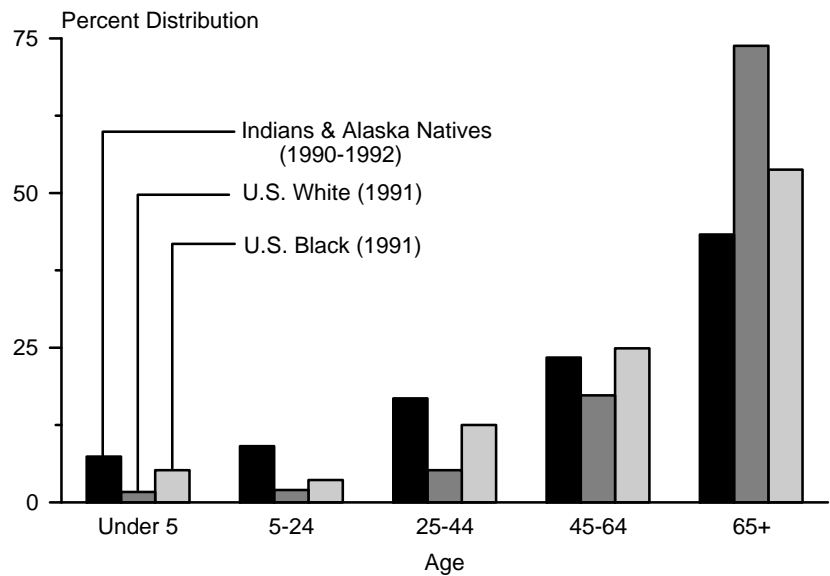
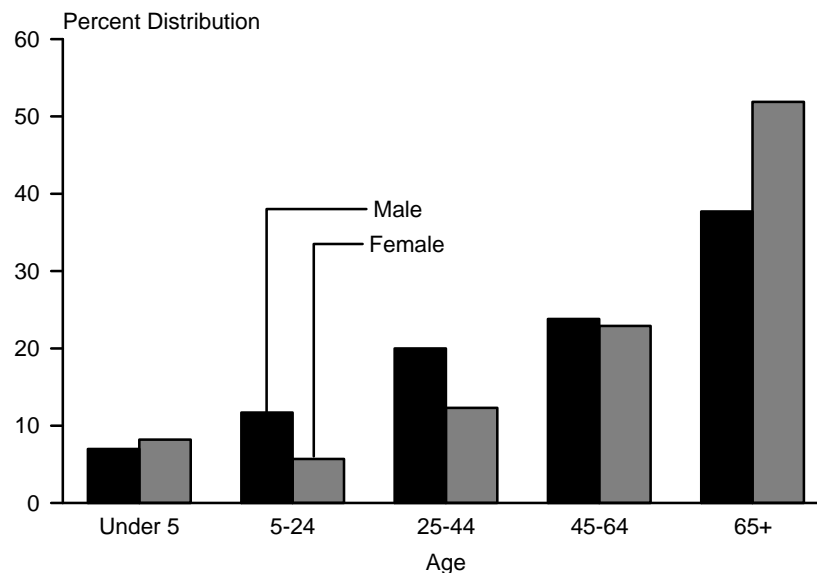


Chart 4.14***Deaths by Age and Sex,
Indians and Alaska Natives
(1990–1992)***

36 percent of Indian male deaths (1990–1992) pertained to ages under 45. This compared with about 23 percent for Indian female deaths.

**Table 4.12*****Number and Percent
Distribution of Deaths by
Age and Sex***

American Indians and Alaska Natives, IHS Service Area, 1990–1992, and Selected U.S. Populations, 1991

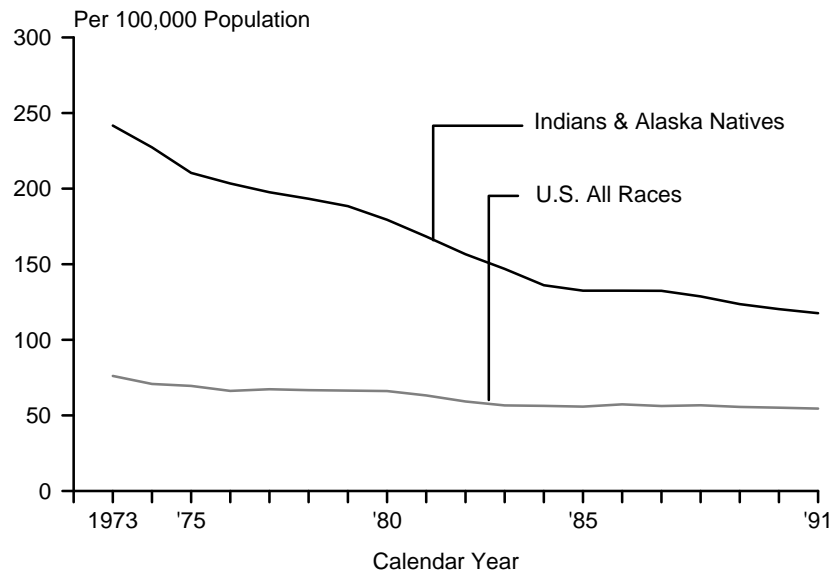
Age Group	American Indian and Alaska Native					
	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Ages	19,429	100.0	11,359	100.0	8,070	100.0
Under 1	956	4.9	531	4.7	425	5.3
1 to 4	257	1.3	153	1.3	104	1.3
5 to 14	263	1.4	174	1.5	89	1.1
15 to 24	1,241	6.4	951	8.4	290	3.6
25 to 34	1,563	8.0	1,150	10.1	413	5.1
35 to 44	1,704	8.8	1,159	10.2	545	6.8
45 to 54	1,897	9.8	1,184	10.4	713	8.8
55 to 64	2,783	14.3	1,611	14.2	1,172	14.5
65 to 74	3,445	17.7	1,881	16.6	1,564	19.4
75 to 84	3,232	16.6	1,658	14.6	1,574	19.5
85 and over	2,084	10.7	905	8.0	1,179	14.6
Age Not Stated	4	0.0	2	0.0	2	0.0

Age Group	United States		
	All Races	White	Black
Number of Deaths, All Ages	2,169,518	1,868,904	269,525
Percent Distribution, All Ages	100.0	100.0	100.0
Under 1	1.7	1.3	4.5
1 to 4	0.3	0.3	0.7
5 to 14	0.4	0.3	0.7
15 to 24	1.7	1.4	3.5
25 to 34	2.7	2.3	5.8
35 to 44	4.1	3.4	8.2
45 to 54	5.6	5.0	9.0
55 to 64	11.4	11.0	14.3
65 to 74	22.1	22.2	20.9
75 to 84	28.0	29.2	20.1
85 and over	22.0	23.5	12.3
Age Not Stated	0.0	0.0	0.1

NOTE: 0.0 Rounds to zero.

Chart 4.15***Age-Adjusted Injury and Poisoning Deaths***

The American Indian and Alaska Native age-adjusted death rate due to injury and poisoning (accidents, suicide, homicide, and other injuries) in 1990-1992 (117.6 deaths per 100,000 population) is less than half of what it was in 1972-1974 (241.7). However, the rate is over twice the U.S. All Races rate of 54.5 for 1991.

**Table 4.15*****Deaths and Mortality Rates due to Injury and Poisoning¹***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White	Ratio Indian to:	
	Number	Rate	Number	Rate	Rate	U.S. All Races	U.S. White
(1992)	1,369						
1990-1992 (1991)	1,397	117.6	149,942	54.5	49.8	2.2	2.4
1989-1991 (1990)	1,349	120.3	150,211	55.1	50.8	2.2	2.4
1988-1990 (1989)	1,367	123.6	150,869	55.6	50.9	2.2	2.4
1987-1989 (1988)	1,391	128.7	152,572	56.7	52.7	2.3	2.4
1986-1988 (1987)	1,390	132.4	149,942	56.2	52.8	2.4	2.5
1985-1987 (1986)	1,375	132.5	151,032	57.4	54.1	2.3	2.4
1984-1986 (1985)	1,275	132.5	145,648	55.8	53.0	2.4	2.5
1983-1985 (1984)	1,254	136.1	145,012	56.3	53.7	2.4	2.5
1982-1984 (1983)	1,280	146.9	144,091	56.6	53.6	2.6	2.7
1981-1983 (1982)	1,351	156.6	147,894	59.2	55.9	2.6	2.8
1980-1982 (1981)	1,344	168.3	155,576	63.2	59.5	2.7	2.8
1979-1981 (1980)	1,418	179.2	160,551	66.1	61.9	2.7	2.9
1978-1980 (1979)	1,472	188.4	158,945	66.4	62.1	2.8	3.0
1977-1979 (1978)	1,383	193.3	157,450	66.7	62.6	2.9	3.1
1976-1978 (1977)	1,346	197.6	156,308	67.3	62.8	2.9	3.1
1975-1977 (1976)	1,321	203.4	151,913	66.2	63.8	3.1	3.2
1974-1976 (1975)	1,283	210.4	156,263	69.5	63.8	3.0	3.3
1973-1975 (1974)	1,229	227.3	156,931	70.8	64.6	3.2	3.5
1972-1974 (1973)	1,381	241.7	166,454	76.1	69.4	3.2	3.5
(1972)	1,241						
1954-1956 (1955)	2,273	200.3	117,650	69.2	51.9	2.9	3.9

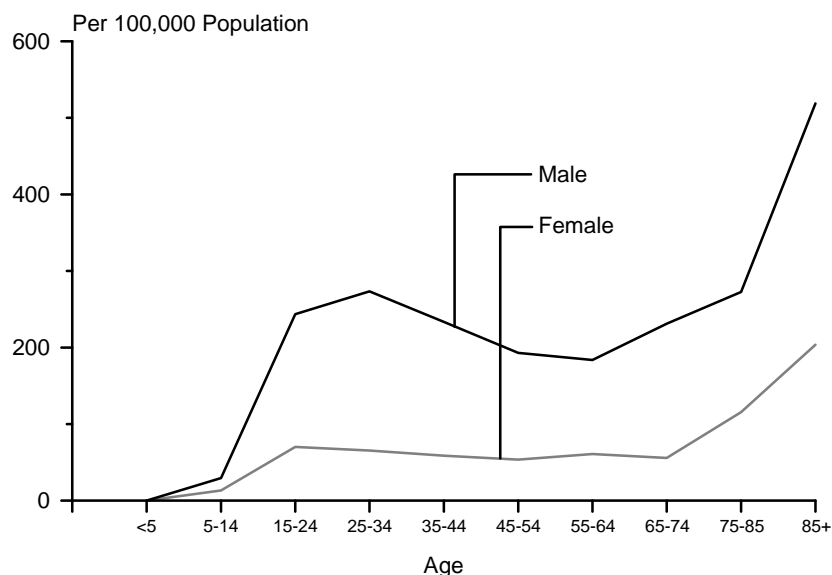
NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single years specified.

¹ Includes the following deaths and ICD-9 codes; Motor vehicle accidents-E810-E825, Other accidents - E800-E807, E826-E949, Suicide - E950-E959, Homicide and legal intervention - E960-E978, Injury undetermined whether accidentally or purposely inflicted - E980-E989, and Injury resulting from operations of war - E990-E999.

Chart 4.16

Injury and Poisoning Death Rates by Age and Sex, Indians and Alaska Natives (1990-92)

The age-specific death rate due to injury and poisoning for Indian males (1990-1992) was higher for all age groups in comparison with Indian females. The Indian male rate was over 230 deaths per 100,000 population for age groups 15 through 44 and 65 and over.

**Table 4.16**

Injury and Poisoning¹ Mortality Rates by Age and Sex

American Indians and Alaska Natives, IHS Service Area, 1990-1992, and U.S. All Races and White Populations, 1991
Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	21.4	29.4	13.2
15-24 years	158.6	243.6	70.2
25-34 years	167.1	273.4	65.4
35-44 years	143.2	233.5	58.8
45-54 years	120.2	193.0	53.5
55-64 years	117.9	183.7	60.8
65-74 years	133.4	231.2	55.7
75-84 years	178.7	272.6	115.5
85 years+	319.5	518.9	203.7

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	23.6	26.6	20.4
5-14 years	12.5	16.7	8.2
15-24 years	78.9	123.3	32.5
25-34 years	69.8	110.9	28.7
35-44 years	58.2	90.7	26.4
45-54 years	52.8	79.9	26.9
55-64 years	53.3	81.4	28.0
65-74 years	66.4	99.7	40.4
75-84 years	127.4	192.9	87.7
85 years+	288.0	428.8	233.6

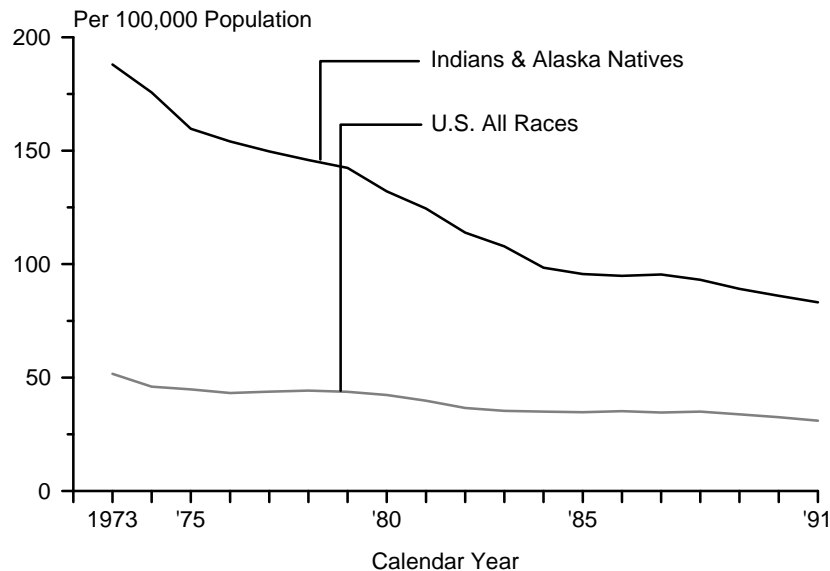
Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	20.3	23.0	17.3
5-14 years	11.5	15.1	7.6
15-24 years	70.1	106.4	31.8
25-34 years	61.6	96.9	25.6
35-44 years	52.8	81.3	24.3
45-54 years	50.0	74.7	26.1
55-64 years	51.1	77.1	27.3
65-74 years	64.5	96.0	39.7
75-84 years	127.3	192.3	87.9
85 years+	292.8	436.0	235.7

¹ Includes deaths with ICD-9 codes E800.0-E999.9.

NOTE: — Represents zero.

Chart 4.17***Age-Adjusted Accident Death Rates***

The age-adjusted accident death rate for American Indians and Alaska Natives dropped from 188.0 in 1972-1974 to 83.2 in 1990-1992, a decrease of 56 percent. However, the rate is nearly 2.7 times the U.S. All Races rate of 31.0 for 1991.

**Table 4.17*****Accident Deaths and Mortality Rates***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992

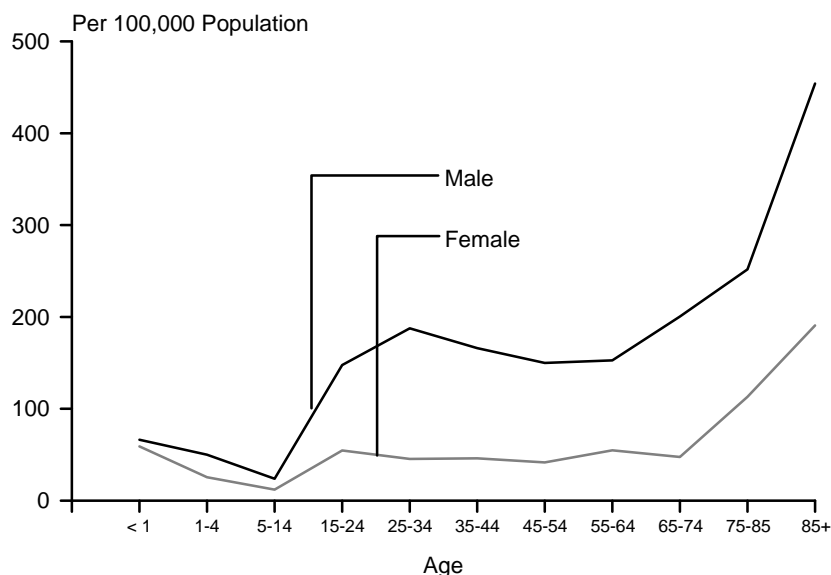
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native				U.S. All Races			U.S. White		
	Total Deaths	All Accidents	Motor Vehicle	Other	All Accidents	Motor Vehicle	Other	All Accidents	Motor Vehicle	Other
(1992)	940									
1990-1992 (1991)	988	83.2	47.5	37.6	31.0	17.0	13.9	30.3	17.2	13.0
1989-1991 (1990)	970	86.0	48.4	37.6	32.5	18.5	14.0	31.8	18.6	13.0
1988-1990 (1989)	969	89.1	49.6	39.5	33.8	18.9	14.9	32.9	19.1	13.8
1987-1989 (1988)	1,012	93.1	52.2	41.0	35.0	19.7	15.3	34.1	20.0	14.1
1986-1988 (1987)	1,000	95.4	54.3	41.1	34.6	19.5	15.2	33.9	19.8	14.0
1985-1987 (1986)	983	94.8	54.2	40.7	35.2	19.4	15.7	34.5	19.8	14.7
1984-1986 (1985)	912	95.6	53.0	42.7	34.7	18.8	16.0	34.1	19.1	15.0
1983-1985 (1984)	920	98.4	53.2	45.2	35.0	19.1	15.9	34.6	19.6	15.0
1982-1984 (1983)	905	107.8	57.0	50.8	35.3	18.5	16.8	34.7	19.0	15.7
1981-1983 (1982)	999	113.9	62.1	51.9	36.6	19.3	17.3	36.1	19.8	16.3
1980-1982 (1981)	972	124.5	69.4	55.1	39.8	21.8	18.0	39.3	22.5	16.8
1979-1981 (1980)	1,058	132.1	75.2	56.8	42.3	22.9	19.5	41.5	23.4	18.0
1978-1980 (1979)	1,095	142.4	80.4	62.0	43.7	23.7	20.0	42.9	24.3	18.6
1977-1979 (1978)	1,070	145.9	82.4	63.5	44.3	23.4	20.9	43.3	23.8	19.5
1976-1978 (1977)	1,004	149.7	85.0	64.8	43.8	22.4	21.4	42.5	22.5	20.0
1975-1977 (1976)	994	154.1	86.9	67.2	43.2	21.5	21.7	41.8	21.5	20.3
1974-1976 (1975)	999	159.7	87.8	72.0	44.8	21.3	23.5	43.1	21.2	21.9
1973-1975 (1974)	921	175.7	97.3	78.4	46.0	21.8	24.2	44.3	21.7	22.6
1972-1974 (1973)	1,089	188.0	104.8	83.3	51.7	26.4	25.3	49.5	26.0	23.5
(1972)	987									
1954-1956 (1955)	714	184.0	97.6	90.3	54.3	24.6	29.7	52.2	24.3	27.9

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.18***Accident Death Rates by Age and Sex, Indians and Alaska Natives (1990-1992)***

The age-specific death rate for accidents for Indian males (1990-1992) was higher for all age groups in comparison with Indian females. The Indian male rate was over 3 times the Indian female rate for age groups 25 through 54 and 65 to 74.

**Table 4.18*****Accident¹ Mortality Rates by Age and Sex***

American Indians and Alaska Natives, IHS Service Area, 1990-1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 1year	61.2	66.3	59.1
1-4 years	36.9	49.9	25.5
5-14 years	17.5	23.9	12.0
15-24 years	99.4	147.6	54.6
25-34 years	112.0	187.6	45.4
35-44 years	101.4	166.1	46.0
45-54 years	90.9	149.8	41.5
55-64 years	97.7	152.6	54.8
65-74 years	112.1	200.4	47.4
75-84 years	164.6	251.7	113.1
85 years+	280.3	454.1	190.8

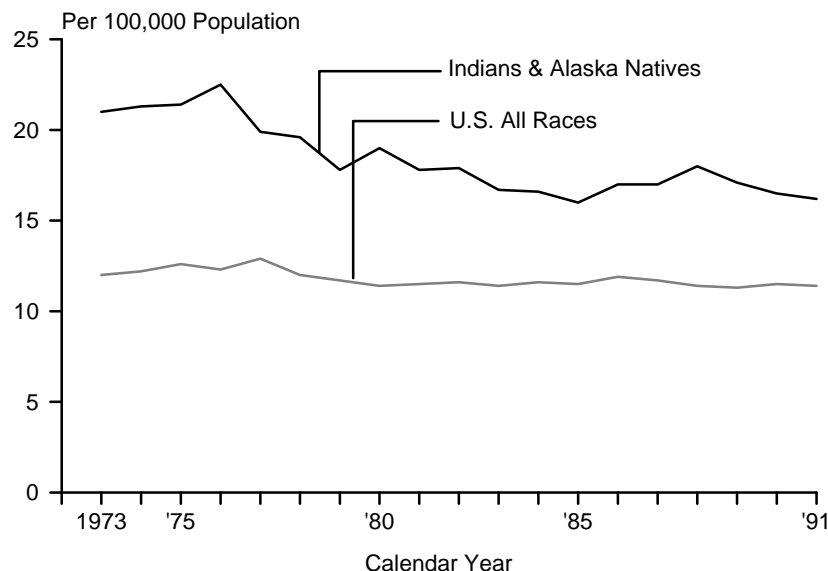
Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 1year	24.0	27.1	20.7
1-4 years	17.5	20.2	14.8
5-14 years	10.2	13.6	6.7
15-24 years	42.0	62.7	21.2
25-34 years	34.5	54.6	15.1
35-44 years	29.9	46.5	14.0
45-54 years	27.7	41.8	14.7
55-64 years	31.2	46.1	18.3
65-74 years	44.5	61.9	31.5
75-84 years	98.3	132.7	78.0
85 years+	258.4	351.1	222.9

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 1year	20.6	22.8	18.3
1-4 years	16.1	18.6	13.5
5-14 years	9.6	12.6	6.4
15-24 years	44.5	65.0	22.8
25-34 years	34.1	53.1	14.7
35-44 years	28.0	43.0	12.9
45-54 years	26.4	39.2	14.0
55-64 years	29.7	43.0	17.5
65-74 years	43.0	58.6	30.8
75-84 years	98.3	130.9	78.7
85 years+	262.7	354.2	225.5

¹ Includes deaths with ICD-9 codes E800-E949.

Chart 4.19***Age-Adjusted Suicide Death Rates***

The age-adjusted suicide death rate for American Indians and Alaska Natives has decreased 23 percent since 1972-1974. The Indian rate for 1990-1992 was 16.2 deaths per 100,000 population compared with the U.S. All Races rate of 11.4 for 1991, a ratio of 1.4 to 1.

**Table 4.19*****Suicide Deaths and Mortality Rates***

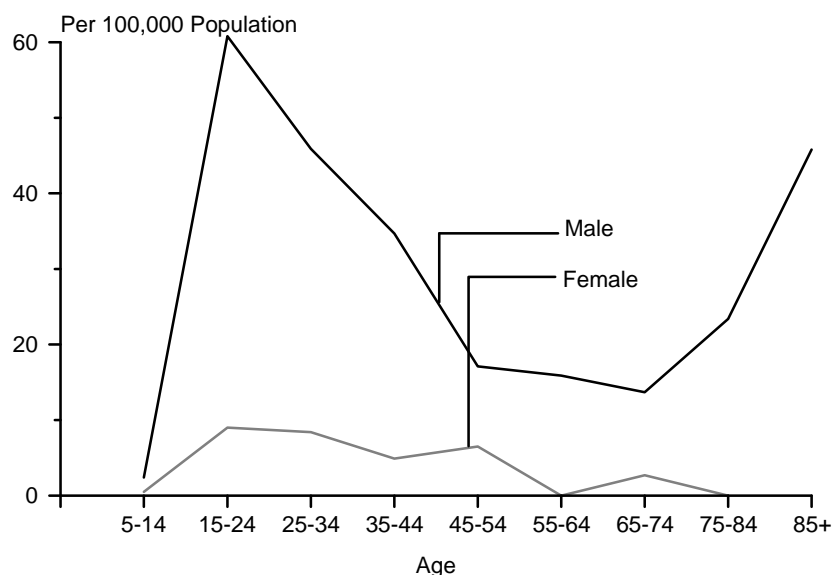
American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	193						
1990-1992 (1991)	184	16.2	30,810	11.4	12.1	1.4	1.3
1989-1991 (1990)	195	16.5	30,906	11.5	12.2	1.4	1.4
1988-1990 (1989)	192	17.1	30,232	11.3	12.0	1.5	1.4
1987-1989 (1988)	185	17.5	30,407	11.4	12.2	1.5	1.4
1986-1988 (1987)	187	17.0	30,796	11.7	12.5	1.5	1.4
1985-1987 (1986)	158	17.0	30,904	11.9	12.7	1.4	1.3
1984-1986 (1985)	172	16.0	29,453	11.5	12.3	1.4	1.3
1983-1985 (1984)	148	16.6	29,286	11.6	12.4	1.4	1.3
1982-1984 (1983)	161	16.7	28,295	11.4	12.2	1.5	1.4
1981-1983 (1982)	154	17.9	28,242	11.6	12.4	1.5	1.4
1980-1982 (1981)	157	17.8	27,596	11.5	12.2	1.5	1.5
1979-1981 (1980)	146	19.0	26,869	11.4	12.1	1.7	1.6
1978-1980 (1979)	162	17.8	27,204	11.7	12.4	1.5	1.4
1977-1979 (1978)	117	19.6	27,294	12.0	12.7	1.6	1.5
1976-1978 (1977)	161	19.9	28,681	12.9	13.6	1.5	1.5
1975-1977 (1976)	143	22.5	26,832	12.3	12.9	1.8	1.7
1974-1976 (1975)	139	21.4	27,063	12.6	13.3	1.7	1.6
1973-1975 (1974)	122	21.3	25,683	12.2	12.8	1.7	1.7
1972-1974 (1973)	116	21.0	25,118	12.0	12.6	1.8	1.7
(1972)	113		25,004				
1954-1956 (1955)	39	11.9	16,760	9.9	10.4	1.2	1.1

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.20***Suicide Death Rates by Age and Sex, Indians and Alaska Natives (1990–1992)***

The age-specific suicide death rate (1990–1992) for Indian males was higher for all age groups in comparison with Indian females. The Indian male rate was at its highest (60.8 deaths per 100,000 population) for age group 15 to 24.

**Table 4.20*****Suicide¹ Mortality Rates by Age and Sex***

American Indians and Alaska Natives, IHS Service Area, 1990–1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	1.5	2.4	0.5
15–24 years	35.4	60.8	9.0
25–34 years	26.8	45.9	8.4
35–44 years	19.3	34.7	4.9
45–54 years	11.6	17.1	6.5
55–64 years	7.4	15.9	—
65–74 years	7.6	13.7	2.7
75–84 years	9.4	23.4	—
85 years+	16.8	45.8	—

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	0.7	1.1	0.0
15–24 years	13.1	21.9	3.8
25–34 years	15.2	25.1	5.4
35–44 years	14.7	23.1	6.5
45–54 years	15.5	23.8	7.7
55–64 years	15.4	25.4	6.5
65–74 years	16.9	30.7	6.0
75–84 years	23.5	53.0	5.7
85 years+	24.0	69.7	6.3

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	0.8	1.2	0.4
15–24 years	13.9	23.1	4.2
25–34 years	16.0	26.1	5.8
35–44 years	16.0	24.7	7.2
45–54 years	16.8	25.4	8.4
55–64 years	16.6	26.9	7.1
65–74 years	18.0	32.6	6.4
75–84 years	24.9	56.1	6.0
85 years+	25.6	75.1	6.6

¹ Includes deaths with ICD-9 codes E950–E959.

NOTE: — Represents zero.

Chart 4.21
*Age-Adjusted Homicide
Death Rates*

The age-adjusted homicide death rate for American Indians and Alaska Natives has decreased 40 percent since 1972-1974. In 1990-1992, the Indian rate was 14.6 deaths per 100,000 population compared with 10.9 for the U.S. All Races population in 1991, a ratio of 1.3 to 1.

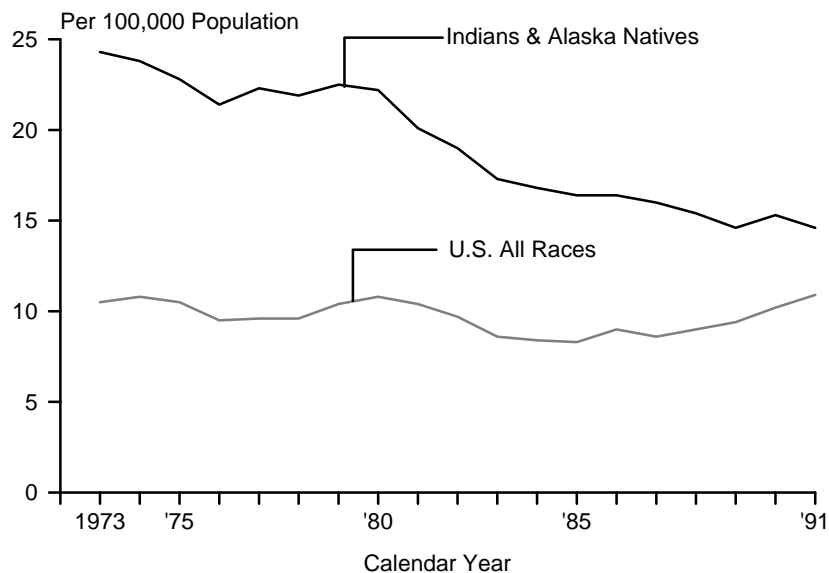


Table 4.21
*Homicide Deaths and
Mortality Rates*

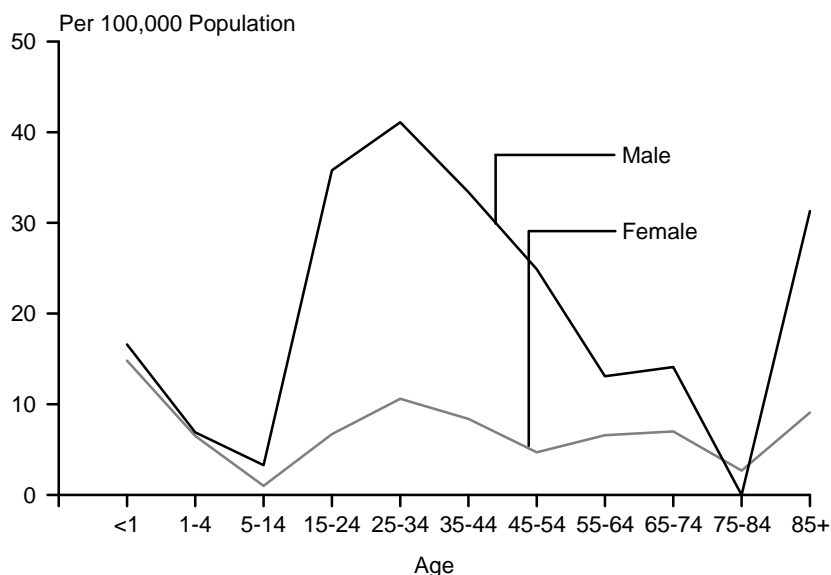
American Indians and Alaska
Natives, IHS Service Area, and
U.S. All Races and White
Populations, 1955-1992
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	168						
1990-1992 (1991)	199	14.6	26,513	10.9	6.2	1.3	2.4
1989-1991 (1990)	153	15.3	24,932	10.2	5.9	1.5	2.6
1988-1990 (1989)	177	14.6	22,909	9.4	5.4	1.6	2.7
1987-1989 (1988)	160	15.4	22,032	9.0	5.3	1.7	2.9
1986-1988 (1987)	161	16.0	21,103	8.6	5.3	1.9	3.0
1985-1987 (1986)	184	16.4	21,731	9.0	5.6	1.8	2.9
1984-1986 (1985)	151	16.4	19,893	8.3	5.4	2.0	3.0
1983-1985 (1984)	146	16.8	19,796	8.4	5.5	2.0	3.1
1982-1984 (1983)	171	17.3	20,191	8.6	5.6	2.0	3.1
1981-1983 (1982)	145	19.0	22,358	9.7	6.3	2.0	3.0
1980-1982 (1981)	165	20.1	23,646	10.4	6.6	1.9	3.0
1979-1981 (1980)	172	22.2	24,278	10.8	6.9	2.1	3.2
1978-1980 (1979)	164	22.5	22,550	10.4	6.5	2.2	3.5
1977-1979 (1978)	158	21.9	20,432	9.6	6.0	2.3	3.7
1976-1978 (1977)	139	22.3	19,968	9.6	5.9	2.3	3.8
1975-1977 (1976)	144	21.4	19,554	9.5	5.5	2.3	3.9
1974-1976 (1975)	115	22.8	21,310	10.5	6.1	2.2	3.7
1973-1975 (1974)	136	23.8	21,465	10.8	6.0	2.2	4.0
1972-1974 (1973)	139	24.3	20,465	10.5	5.7	2.3	4.3
(1972)	93		19,638				
1954-1956 (1955)	77	23.8	7,418	4.8	2.4	5.0	9.9

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.22***Homicide Death Rates by Age and Sex, Indians and Alaska Natives (1990–1992)***

The age-specific homicide death rate (1990–1992) for Indian males was higher for all age groups except 75 to 84 in comparison with Indian females. The Indian male rate exceeded 33.0 deaths per 100,000 population for age groups 15 through 44.

**Table 4.22*****Homicide¹ Mortality Rates by Age and Sex***

American Indians and Alaska Natives, IHS Service Area, 1990–1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 1 year	15.3	16.6	14.8
1–4 years	6.5	6.9	6.5
5–14 years	2.1	3.3	1.0
15–24 years	20.9	35.8	6.7
25–34 years	24.8	41.1	10.6
35–44 years	20.0	33.4	8.4
45–54 years	14.0	24.9	4.7
55–64 years	9.4	13.1	6.6
65–74 years	9.9	14.1	7.0
75–84 years	1.6	—	2.7
85 years+	16.8	31.3	9.1

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 1 year	9.5	10.0	8.9
1–4 years	2.8	3.0	2.6
5–14 years	1.4	1.8	1.0
15–24 years	22.4	37.4	7.0
25–34 years	18.2	29.1	7.5
35–44 years	11.6	18.5	5.1
45–54 years	8.2	12.9	3.8
55–64 years	5.5	8.7	2.7
65–74 years	4.0	6.2	2.4
75–84 years	4.2	5.7	3.4
85 years+	4.1	5.6	3.6

Age Group	U.S. White		
	Both Sexes	Male	Female
Under 1 year	6.7	7.6	5.7
1–4 years	1.9	2.1	1.6
5–14 years	1.0	1.2	0.7
15–24 years	10.9	17.0	4.4
25–34 years	10.1	15.6	4.4
35–44 years	7.3	11.2	3.5
45–54 years	5.9	8.8	3.0
55–64 years	4.0	6.1	2.1
65–74 years	2.9	4.0	2.0
75–84 years	3.1	3.8	2.6
85 years+	3.4	4.4	2.9

¹ Includes deaths with ICD-9 codes E960–E978.

NOTE: — Represents zero.

Chart 4.23

Other Injury Deaths and Mortality Rates

The age-adjusted death rate due to other injuries (undetermined injury and war injury) has decreased 70 percent since 1972-1974. In 1990-1992, the Indian rate was 2.5 deaths per 100,000 population compared with 0.9 for the U.S. All Races population in 1991, nearly 3 times as great.

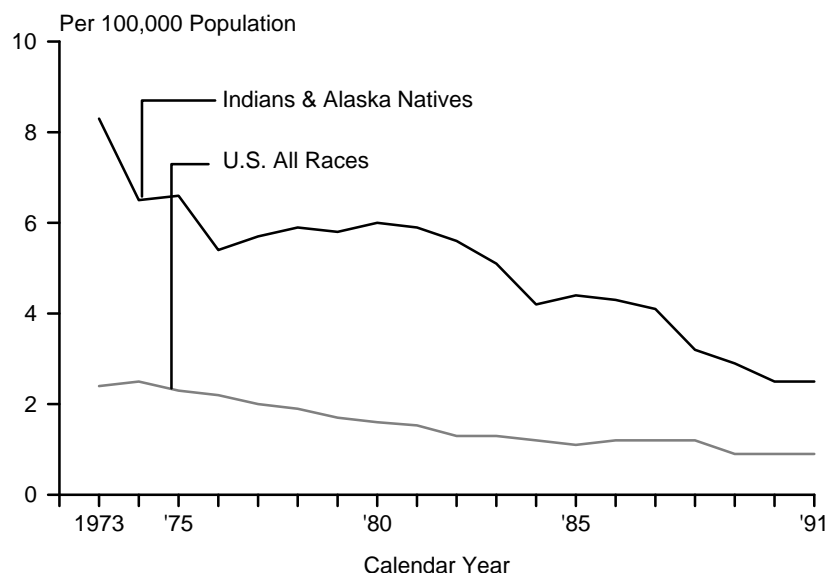


Table 4.23

Deaths and Mortality Rates due to Other Injuries ^{1 2}

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1972-1992

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races			U.S. White Combined Rate	Ratio Indian to:	
	Number of Deaths		Number of Deaths				U.S. All Races	U.S. White
	Undetermined Injury and War Injury	Combined Rate	Undetermined Injury	War Injury	Combined Rate			
(1992)	31							
1990–1992 (1991)	26	2.5	2,517	10	0.9	0.8	2.8	3.1
1989–1991 (1990)	31	2.5	2,376	14	0.9	0.8	2.8	3.1
1988–1990 (1989)	28	2.9	2,686	14	0.9	0.8	3.2	3.6
1987–1989 (1988)	34	3.2	3,018	15	1.2	1.0	2.7	3.2
1986–1988 (1987)	41	4.1	3,011	12	1.2	1.0	3.4	4.1
1985–1987 (1986)	50	4.3	3,108	12	1.2	1.1	3.6	3.9
1984–1986 (1985)	39	4.4	2,826	19	1.1	1.0	4.0	4.4
1983–1985 (1984)	39	4.2	2,996	23	1.2	1.1	3.5	3.8
1982–1984 (1983)	40	5.1	3,104	13	1.3	1.1	3.9	4.6
1981–1983 (1982)	52	5.6	3,201	11	1.3	1.2	4.3	4.7
1980–1982 (1981)	46	5.9	3,614	16	1.5	1.3	3.9	4.5
1979–1981 (1980)	39	6.0	3,663	23	1.6	1.4	3.8	4.3
1978–1980 (1979)	49	5.8	3,860	17	1.7	1.5	2.4	2.7
1977–1979 (1978)	37	5.9	4,144	19	1.9	1.6	3.1	3.7
1976–1978 (1977)	38	5.7	4,433	24	2.0	1.6	2.9	3.6
1975–1977 (1976)	39	5.4	4,744	22	2.2	1.8	2.5	2.2
1974–1976 (1975)	29	6.6	4,838	22	2.3	1.9	2.9	3.5
1973–1975 (1974)	50	6.5	5,149	12	2.5	2.1	2.6	3.1
1972–1974 (1973)	35	8.3	5,030	20	2.4	2.0	3.5	4.2
(1972)	46							

NOTE: Data were first available for these cause of death categories in 1969, through use of the ICD-8 coding system. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

¹ Includes deaths with ICD-9 codes E980-E989; Injury undetermined whether accidentally or purposely inflicted.

² Includes deaths with ICD-9 codes E990-E999; Injury resulting from operations of war.

³ In 1973 there was one American Indian injury death resulting from operations of war. For each of the other years shown above there were no American Indian injury deaths due to this cause.

Chart 4.24***Other Injury Death Rates by Age and Sex, Indians and Alaska Natives (1990-1992)***

The age-specific death rate due to other injuries (1990-1992) for Indian males was higher for all age groups through age 84 in comparison with Indian females. Indian females over 84 years old, however, had the highest age-specific rate, 8.9.

**Table 4.24*****Other Injury¹ Mortality Rates by Age and Sex***

American Indians and Alaska Natives, IHS Service Area, 1990-1992, and U.S. All Races and White Populations, 1991
Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	0.2	0.5	0.0
15-24 years	2.9	4.2	1.5
25-34 years	3.5	4.6	2.5
35-44 years	2.5	4.4	0.8
45-54 years	3.7	5.7	2.0
55-64 years	3.5	6.4	0.9
65-74 years	3.8	8.6	0.0
75-84 years	3.1	3.9	2.6
85 years+	5.6	0.0	8.9

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	0.5	0.5	0.5
5-14 years	0.1	0.2	0.1
15-24 years	0.9	1.3	0.4
25-34 years	1.5	2.2	0.8
35-44 years	1.7	2.6	0.9
45-54 years	1.1	1.4	0.7
55-64 years	0.8	1.2	0.5
65-74 years	0.7	0.9	0.5
75-84 years	1.0	1.5	0.6
85 years+	1.3	2.5	0.8

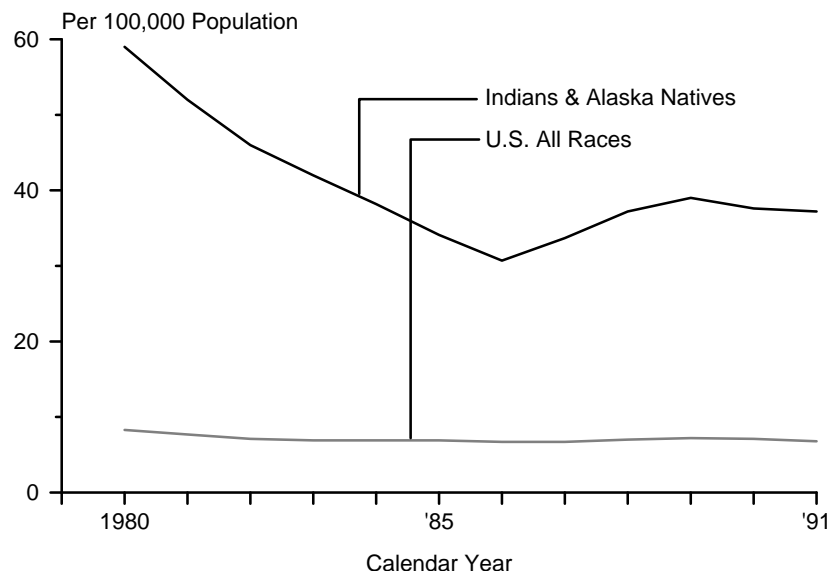
Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	0.4	0.4	0.4
5-14 years	0.1	0.1	0.1
15-24 years	0.8	1.2	0.4
25-34 years	1.4	2.0	0.7
35-44 years	1.6	2.4	0.8
45-54 years	1.0	1.3	0.7
55-64 years	0.8	1.1	0.5
65-74 years	0.6	0.8	0.5
75-84 years	1.0	1.5	0.7
85 years+	1.2	2.3	0.8

¹ Includes deaths with ICD-9 codes E980.0-E999.9.

NOTE: — Represents zero. 0.0 Rounds to zero.

Chart 4.25***Age-Adjusted Alcoholism Death Rates***

The age-adjusted alcoholism death rate for American Indians and Alaska Natives has decreased 37 percent since 1979-1981. In 1990-1992, it was 37.2 deaths per 100,000 population or 5.5 times the U.S. All Races rate of 6.8 in 1991.

**Table 4.25*****Alcoholism Deaths and Mortality Rates***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1979-1992

Age-Adjusted Rate per 100,000 Population

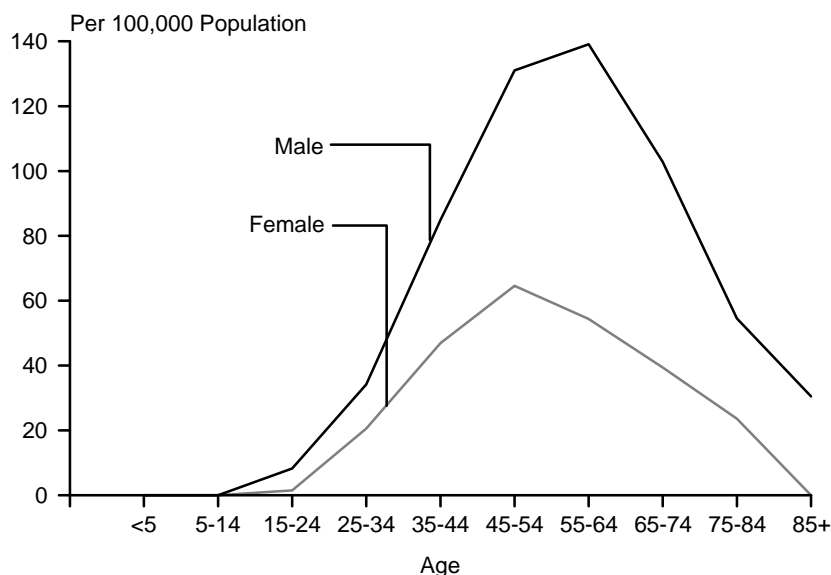
Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio American Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	393						
1990-1992 (1991)	360	37.2	19,091	6.8	6.0	5.5	6.2
1989-1991 (1990)	345	37.6	19,592	7.1	6.1	5.3	6.2
1988-1990 (1989)	374	39.0	19,619	7.2	6.1	5.4	6.4
1987-1989 (1988)	372	37.2	18,715	7.0	5.9	5.3	6.3
1986-1988 (1987)	260	33.7	17,656	6.7	5.7	5.0	5.9
1985-1987 (1986)	260	30.7	17,283	6.7	5.6	4.6	5.5
1984-1986 (1985)	272	34.1	17,609	6.9	5.8	4.9	5.9
1983-1985 (1984)	300	38.2	17,452	6.9	5.9	5.5	6.5
1982-1984 (1983)	291	42.0	17,237	6.9	5.9	6.1	7.1
1981-1983 (1982)	286	46.0	17,334	7.1	6.1	6.5	7.5
1980-1982 (1981)	344	52.0	18,469	7.7	6.5	6.8	8.0
1979-1981 (1980)	368	59.0	19,560	8.3	6.9	7.1	8.6
(1979)	377						

NOTE: Includes causes of death previously classified as alcoholism deaths (alcoholic psychosis—291, alcohol dependence syndrome—303, and chronic liver disease and cirrhosis, specified as alcoholic, 571.0-571.3), *plus* deaths caused by alcohol abuse—305.0, alcoholic cardiomyopathy—425.5, alcoholic gastritis—535.3, excessive blood level of alcohol—790.3, and accidental poisoning by alcohol—E860.0 and E860.1. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.26

Alcoholism Death Rates by Age and Sex, Indians and Alaska Natives (1990–1992)

The age-specific alcoholism death rate (1990–1992) for Indian males was higher for all age groups in comparison with Indian females. The Indian males rate exceeded 130.0 deaths per 100,000 population for age groups 45 through 64.

**Table 4.26**

Alcoholism¹ Mortality Rates by Age and Sex

American Indians and Alaska Natives, IHS Service Area, 1990–1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	—	—	—
15–24 years	5.0	8.3	1.5
25–34 years	27.2	34.2	20.6
35–44 years	65.2	84.9	46.9
45–54 years	96.4	131.0	64.6
55–64 years	93.7	139.1	54.4
65–74 years	67.4	102.8	39.4
75–84 years	36.1	54.5	23.6
85 years+	11.2	30.5	—

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 5 years	0.0	—	0.0
5–14 years	0.0	0.0	0.0
15–24 years	0.3	0.5	0.1
25–34 years	2.5	3.5	1.5
35–44 years	10.0	15.2	4.9
45–54 years	16.7	26.1	7.7
55–64 years	22.8	36.9	10.2
65–74 years	19.3	32.6	8.9
75–84 years	11.6	22.4	5.0
85 years+	4.7	11.8	2.0

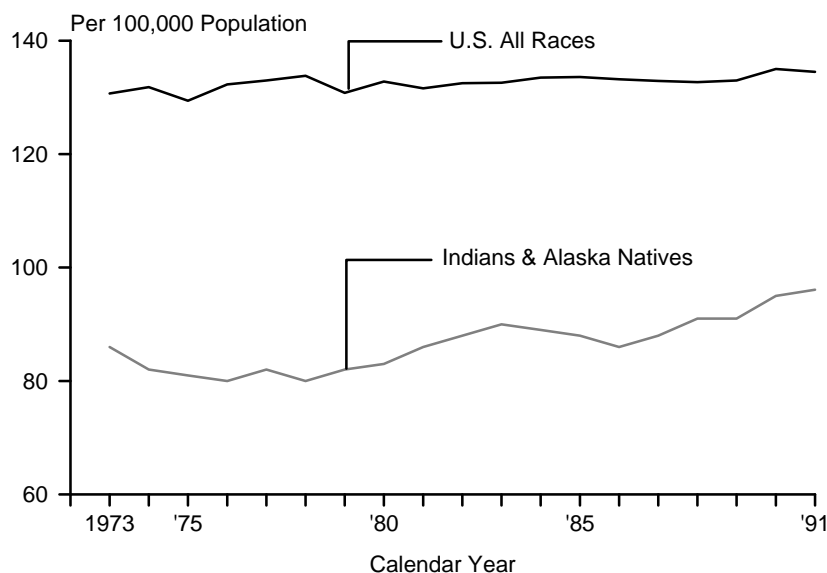
Age Group	U.S. White		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5–14 years	0.0	0.0	—
15–24 years	0.3	0.5	0.1
25–34 years	2.1	3.1	1.2
35–44 years	8.3	12.9	3.6
45–54 years	14.4	22.6	6.4
55–64 years	20.9	33.4	9.4
65–74 years	18.1	30.2	8.4
75–84 years	11.2	21.9	4.7
85 years+	4.4	11.1	1.8

¹ Includes deaths with ICD-9 codes 291, 303, 305.0, 425.5, 535.3, 571.0–571.3, 790.3, and E860.0–E860.1.

NOTE: — Represents zero. 0.0 Rounds to zero.

Chart 4.27***Age-Adjusted Malignant Neoplasm Death Rates***

The age-adjusted malignant neoplasms death rate for American Indians and Alaska Natives hit a low in 1977-1979 of 80.2 deaths per 100,000 population, but has generally increased since then. In 1990-1992, the Indian rate was 71 percent of the U.S. All Races rate (1991), 96.1 compared with 134.5.

**Table 4.27*****Malignant Neoplasm Deaths and Mortality Rates***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992

Age-Adjusted Rate per 100,000 Population

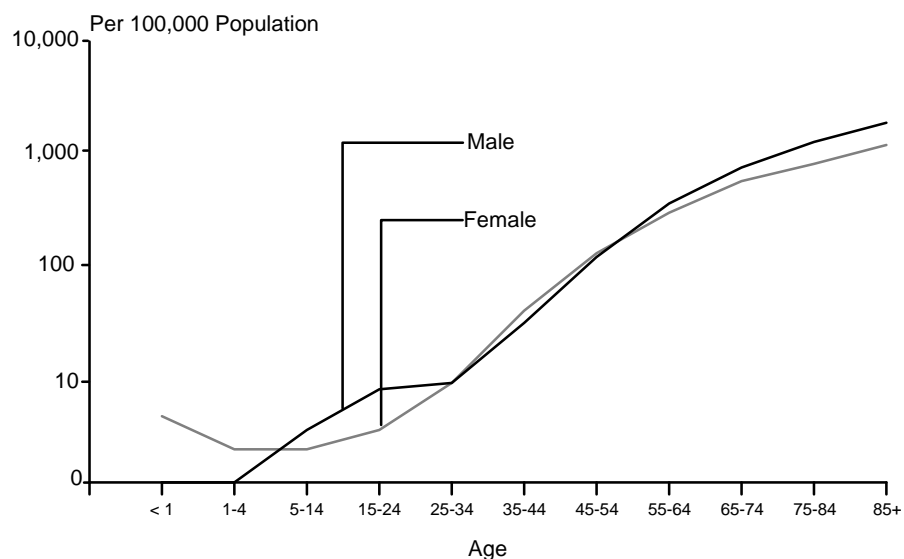
Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	1,026						
1990-1992 (1991)	1,021	96.1	514,657	134.5	131.3	0.7	0.7
1989-1991 (1990)	859	94.5	505,322	135.0	131.5	0.7	0.7
1988-1990 (1989)	913	91.1	496,152	133.0	130.2	0.7	0.7
1987-1989 (1988)	831	90.9	485,048	132.7	130.0	0.7	0.7
1986-1988 (1987)	768	87.6	476,927	132.9	130.1	0.7	0.7
1985-1987 (1986)	756	85.8	469,376	133.2	130.4	0.6	0.7
1984-1986 (1985)	714	88.1	461,563	133.6	130.7	0.7	0.7
1983-1985 (1984)	712	88.8	453,492	133.5	130.2	0.7	0.7
1982-1984 (1983)	662	89.6	442,986	132.6	129.4	0.7	0.7
1981-1983 (1982)	617	87.5	433,795	132.5	129.4	0.7	0.7
1980-1982 (1981)	578	86.3	422,094	131.6	128.5	0.7	0.7
1979-1981 (1980)	567	82.7	416,509	132.8	129.6	0.6	0.6
1978-1980 (1979)	480	81.7	403,395	130.8	130.2	0.6	0.6
1977-1979 (1978)	503	80.2	396,992	133.8	130.8	0.6	0.6
1976-1978 (1977)	456	82.4	386,686	133.0	130.0	0.6	0.6
1975-1977 (1976)	441	80.3	377,312	132.3	129.5	0.6	0.6
1974-1976 (1975)	395	81.4	365,693	129.4	128.1	0.6	0.6
1973-1975 (1974)	403	82.2	360,482	131.8	129.0	0.6	0.6
1972-1974 (1973)	385	85.6	351,055	130.7	127.7	0.7	0.7
(1972)	354		345,618				
1954-1956 (1955)	296	95.0	240,681	125.8	125.8	0.8	0.8

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.28

Malignant Neoplasm Death Rates by Age and Sex, Indians and Alaska Natives (1990-92)

The age-specific malignant neoplasm death rate (1990-1992) for Indian males was greater for age groups 5 through 24 and 55 and over, in comparison with Indian females. The rates for Indian males and females increased with age beginning with age 5.

**Table 4.28**

Malignant Neoplasm¹ Mortality Rates by Age and Sex

American Indians and Alaska Natives, IHS Service Area, 1990-1992, and U.S. All Races and White Populations, 1991

Rate per 100,000 Population

Age Group	Indian and Alaska Native		
	Both Sexes	Male	Female
Under 1	2.0	—	4.1
1-4 years	1.4	0.6	2.3
5-14 years	2.2	2.9	1.5
15-24 years	5.5	7.4	3.4
25-34 years	8.1	7.8	8.4
35-44 years	32.1	27.7	36.2
45-54 years	115.8	111.1	120.1
55-64 years	307.3	338.8	280.1
65-74 years	620.6	721.0	540.9
75-84 years	957.9	1,226.5	776.9
85 years+	1,401.3	1,831.5	1,151.6

Age Group	U.S. All Races		
	Both Sexes	Male	Female
Under 1	1.9	2.2	1.7
1-4 years	3.5	3.8	3.2
5-14 years	3.1	3.6	2.7
15-24 years	5.0	5.8	4.1
25-34 years	12.4	12.3	12.7
35-44 years	43.1	39.0	47.3
45-54 years	155.1	159.4	151.5
55-64 years	448.4	526.3	379.5
65-74 years	871.6	1,121.3	677.4
75-84 years	1,351.6	1,899.3	1,021.2
85 years+	1,773.9	2,753.8	1,395.5

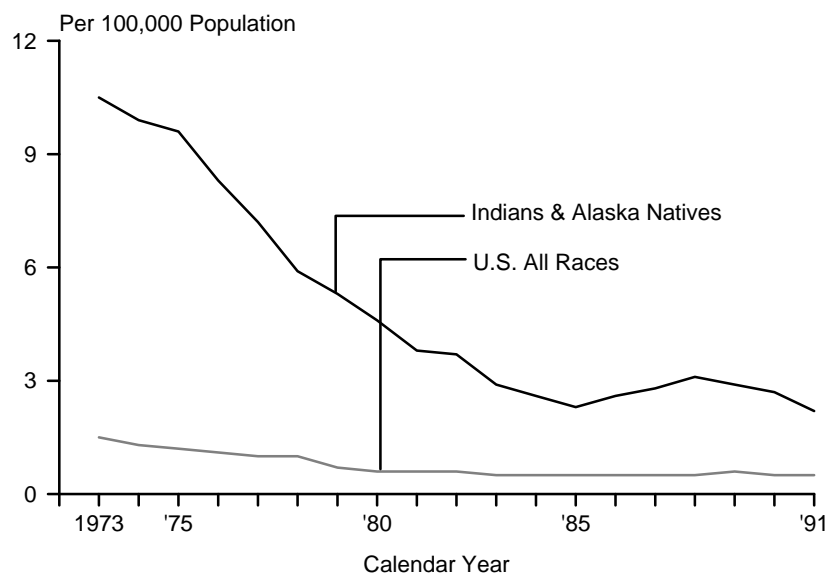
Age Group	U.S. White		
	Both Sexes	Male	Female
Under 1	1.9	1.9	1.8
1-4 years	3.5	3.6	3.3
5-14 years	3.2	3.7	2.7
15-24 years	5.0	6.0	4.0
25-34 years	12.2	12.1	12.3
35-44 years	40.6	36.4	44.8
45-54 years	147.3	147.0	147.7
55-64 years	437.3	505.5	375.1
65-74 years	858.8	1,092.3	674.3
75-84 years	1,703.2	1,867.3	1,019.2
85 years+	1,773.3	2,733.5	1,392.0

¹ Includes deaths with ICD-9 codes 140-208.

NOTE: — Represents zero.

Chart 4.29***Age-Adjusted Tuberculosis Death Rates***

The age-adjusted tuberculosis death rate for American Indians and Alaska Natives has dropped from 10.5 deaths per 100,000 population in 1972-1974 to 2.2 in 1990-1992, a decrease of 79 percent. The Indian rate is still 4.4 times the U.S. All Races rate of 0.5 for 1991.

**Table 4.29*****Tuberculosis Deaths and Mortality Rates***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	19						
1990-1992 (1991)	25	2.2	1,713	0.5	0.3	4.4	7.3
1989-1991 (1990)	24	2.7	1,810	0.5	0.3	5.4	9.0
1988-1990 (1989)	33	2.9	1,970	0.6	0.3	4.8	9.7
1987-1989 (1988)	25	3.1	1,921	0.5	0.3	6.2	10.3
1986-1988 (1987)	28	2.8	1,755	0.5	0.3	5.6	9.3
1985-1987 (1986)	24	2.6	1,782	0.5	0.3	5.2	8.7
1984-1986 (1985)	18	2.3	1,752	0.5	0.3	4.6	7.7
1983-1985 (1984)	17	2.6	1,729	0.5	0.3	5.2	8.7
1982-1984 (1983)	30	2.9	1,779	0.5	0.3	5.8	9.7
1981-1983 (1982)	22	3.7	1,807	0.6	0.4	6.2	9.3
1980-1982 (1981)	30	3.8	1,937	0.6	0.4	6.3	9.5
1979-1981 (1980)	31	4.6	1,978	0.6	0.4	7.7	11.5
1978-1980 (1979)	33	5.3	2,007	0.7	0.4	7.6	13.3
1977-1979 (1978)	40	5.9	2,914	1.0	0.7	5.9	8.4
1976-1978 (1977)	33	7.2	2,968	1.0	0.7	7.2	10.3
1975-1977 (1976)	48	8.3	3,130	1.1	0.8	7.5	10.4
1974-1976 (1975)	53	9.6	3,333	1.2	0.9	8.0	12.0
1973-1975 (1974)	48	9.9	3,513	1.3	0.9	7.6	11.0
1972-1974 (1973)	45	10.5	3,875	1.5	1.1	7.0	9.5
(1972)	50		4,376				
1954-1956 (1955)	253	57.9	14,940	8.4	6.2	6.9	9.3

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified.

Chart 4.30
Age-Adjusted Diabetes Mellitus Death Rates

The age-adjusted diabetes mellitus death rate for American Indians and Alaska Natives is slightly higher today than it was in 1972-1974 when it was 28.1 deaths per 100,000 population. In 1990-1992, the Indian rate of 30.0 was 2.5 times the U.S. All Races rate of 11.8 in 1991.

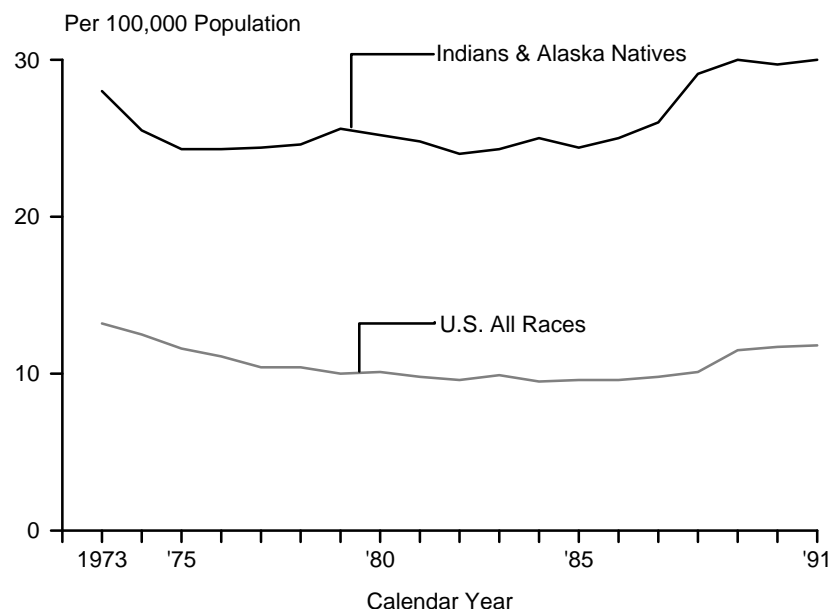


Table 4.30
Diabetes Mellitus Deaths and Mortality Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	324						
1990-1992 (1991)	275	30.0	48,951	11.8	10.5	2.5	2.9
1989-1991 (1990)	285	29.7	47,664	11.7	10.4	2.5	2.9
1988-1990 (1989)	301	30.0	46,833	11.5	10.3	2.6	2.9
1987-1989 (1988)	260	29.1	40,368	10.1	9.0	2.9	3.2
1986-1988 (1987)	227	26.0	38,532	9.8	8.7	2.7	3.0
1985-1987 (1986)	195	25.0	37,184	9.6	8.5	2.6	2.9
1984-1986 (1985)	208	24.4	36,969	9.6	8.6	2.5	2.8
1983-1985 (1984)	189	25.0	35,787	9.5	8.5	2.6	2.9
1982-1984 (1983)	179	24.3	36,246	9.9	8.9	2.5	2.7
1981-1983 (1982)	164	24.0	34,583	9.6	8.7	2.5	2.8
1980-1982 (1981)	156	24.8	34,642	9.8	8.8	2.5	2.8
1979-1981 (1980)	173	25.2	34,851	10.1	9.1	2.5	2.8
1978-1980 (1979)	153	25.6	33,192	10.0	9.0	2.6	2.8
1977-1979 (1978)	147	24.6	33,841	10.4	9.4	2.4	2.6
1976-1978 (1977)	133	24.4	32,989	10.4	9.4	2.3	2.6
1975-1977 (1976)	125	24.3	34,508	11.1	10.0	2.2	2.4
1974-1976 (1975)	123	24.3	35,230	11.6	10.4	2.1	2.3
1973-1975 (1974)	110	25.5	37,329	12.5	11.4	2.0	2.2
1972-1974 (1973)	117	28.1	38,208	13.2	11.8	2.1	2.4
(1972)	129		38,674				
1954-1956 (1955)	64	17.0	25,488	13.0	12.6	1.3	1.3

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Number of deaths and U.S. rates are for the single year specified.

Chart 4.31
Age-Adjusted
Gastrointestinal Disease
Death Rates

The age-adjusted gastrointestinal disease death rate for American Indians and Alaska Natives has decreased 76 percent since the 1972-1974 rate of 6.2 deaths per 100,000 population. In 1990-1992, the Indian rate (1.5) was essentially the same as the 1991 U.S. All Races rate (1.3).

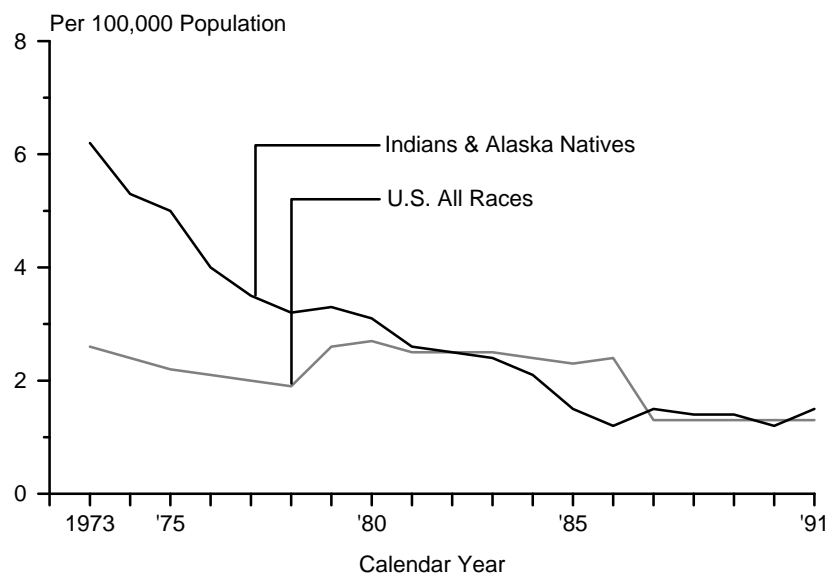


Table 4.31
Gastrointestinal Disease
Deaths and Mortality Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1992

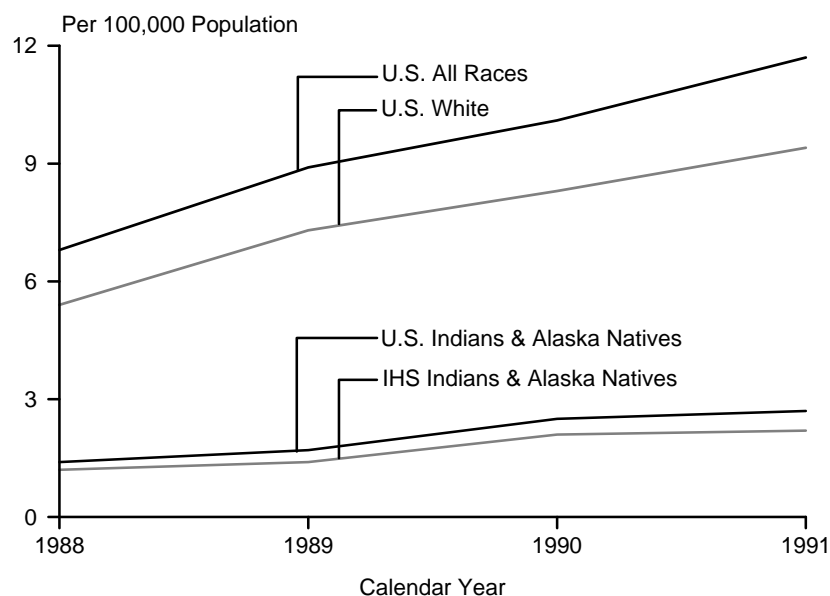
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native		U.S. All Races		U.S. White Rate	Ratio Indian to:	
	Number	Rate	Number	Rate		U.S. All Races	U.S. White
(1992)	18						
1990-1992 (1991)	18	1.5	6,220	1.3	1.2	1.2	1.3
1989-1991 (1990)	17	1.2	6,007	1.3	1.2	0.9	1.0
1988-1990 (1989)	9	1.4	5,897	1.3	1.2	1.1	1.2
1987-1989 (1988)	24	1.4	5,771	1.3	1.5	1.1	0.9
1986-1988 (1987)	14	1.5	5,629	1.3	1.5	1.2	1.0
1985-1987 (1986)	15	1.2	5,622	2.4	1.2	0.5	1.0
1984-1986 (1985)	13	1.5	5,525	2.3	1.3	0.7	1.2
1983-1985 (1984)	21	2.1	5,594	2.4	1.4	0.9	1.6
1982-1984 (1983)	25	2.4	5,709	2.5	1.4	1.0	1.9
1981-1983 (1982)	18	2.5	5,639	2.5	1.2	1.0	2.2
1980-1982 (1981)	20	2.6	5,733	2.5	1.2	1.0	2.2
1979-1981 (1980)	29	3.1	6,076	2.7	1.6	1.2	2.0
1978-1980 (1979)	29	3.3	5,687	2.6	1.8	1.4	2.0
1977-1979 (1978)	26	3.2	6,201	1.9	1.8	1.8	1.9
1976-1978 (1977)	28	3.5	6,156	2.0	1.8	2.1	2.3
1975-1977 (1976)	37	4.0	6,251	2.1	1.9	2.3	2.5
1974-1976 (1975)	36	5.0	6,558	2.2	2.1	2.6	2.8
1973-1975 (1974)	44	5.3	7,066	2.4	2.3	2.5	2.7
1972-1974 (1973)	37	6.2	7,371	2.6	2.4	2.7	2.9
(1972)	43						
1954-1956 (1955)	165	15.4		3.6	3.1	4.3	5.0

NOTE: Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified. Starting in 1979 cause-of-death codes which define gastrointestinal deaths were revised to exclude ICD-9 code 557 (vascular insufficiency of intestine). Currently ICD-9 codes that define gastrointestinal disease deaths include: 004, 006, 007, 008, 009, 535, 555, 556, 558, and 562.

Chart 4.32***Human Immunodeficiency Virus (HIV) Infection Death Rates***

The number of HIV deaths for American Indians and Alaska Natives residing in the entire U.S. in 1992 (57) is nearly 3 times the number in 1987 (20). Indians residing in the IHS service area comprise about 60 percent of all U.S. Indians, but in 1992 had only 35 percent of total Indian HIV deaths.

**Table 4.32*****Human Immunodeficiency Virus (HIV) Infection Deaths and Mortality Rates***

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1987-1992

Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	Indian and Alaska Native				U.S. All Races		U.S. White Rate
	Entire United States		IHS Service Area				
	Number	Rate	Number	Rate	Number	Rate	
(1992)	57		20				
1990–1992 (1991)	76	2.7	38	2.2	29,555	11.7	9.4
1989–1991 (1990)	36	2.5	16	2.1	25,188	10.1	8.3
1988–1990 (1989)	36	1.7	16	1.4	22,082	8.9	7.3
1987–1989 (1988)	26	1.4	13	1.2	16,602	6.8	5.4
(1987)	20		8		13,468	5.5	4.5

NOTE: Includes causes of death with ICD-9 Codes 042-044, first classified in 1987. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and U.S. rates are for the single year specified. Age-adjusted rates based on less than 50 deaths during a 3-year period should be interpreted with caution.

Chart 4.33

Life Expectancy at Birth

Life expectancy at birth for American Indians and Alaska Natives in 1972-1974 was over 10 years less than the life expectancy of the U.S. All Races and White populations in 1973. For 1990-1992 versus 1991, the gap with U.S. All Races population has narrowed to 2.0 years and with the White population to 2.8 years.

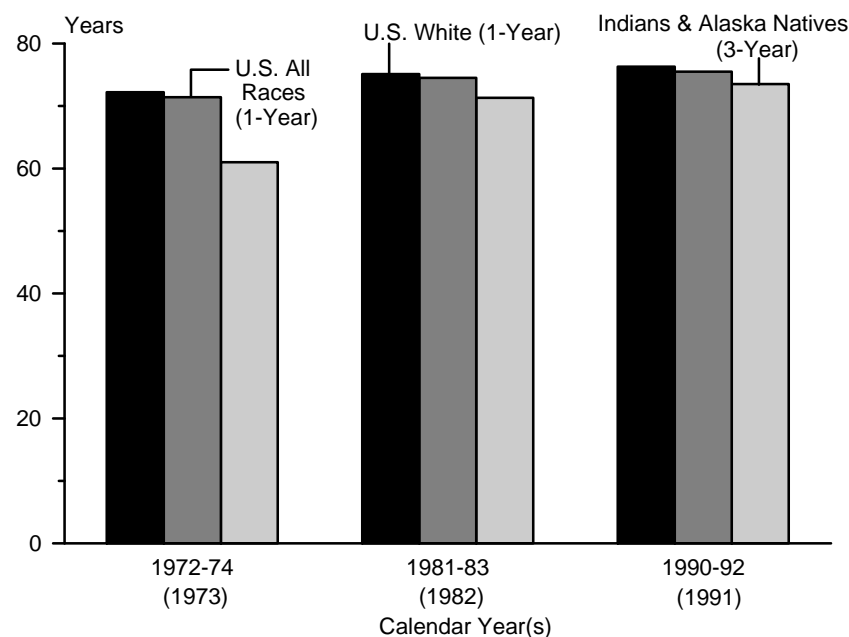


Chart 4.34

Years of Productive Life Lost

The years of productive life lost rate for American Indians and Alaska Natives in 1990-1992 (83.0 per 1,000 population) is less than half of what it was in 1972-1974 (188.3). Although the ratios have decreased considerably over this time period, the Indian rate is still 1.5 times the U.S. All Races rate (55.6) and 1.7 times the White rate (49.9) in 1991.

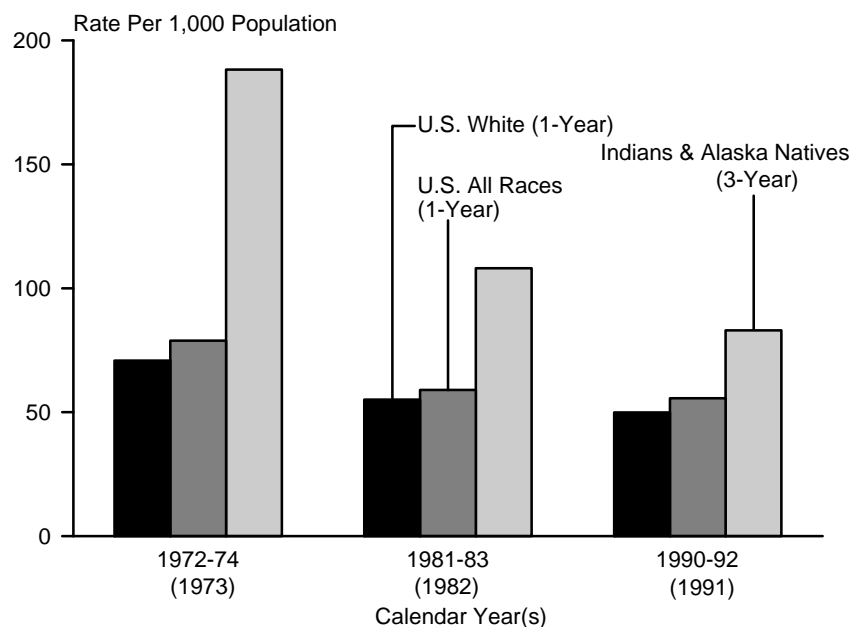
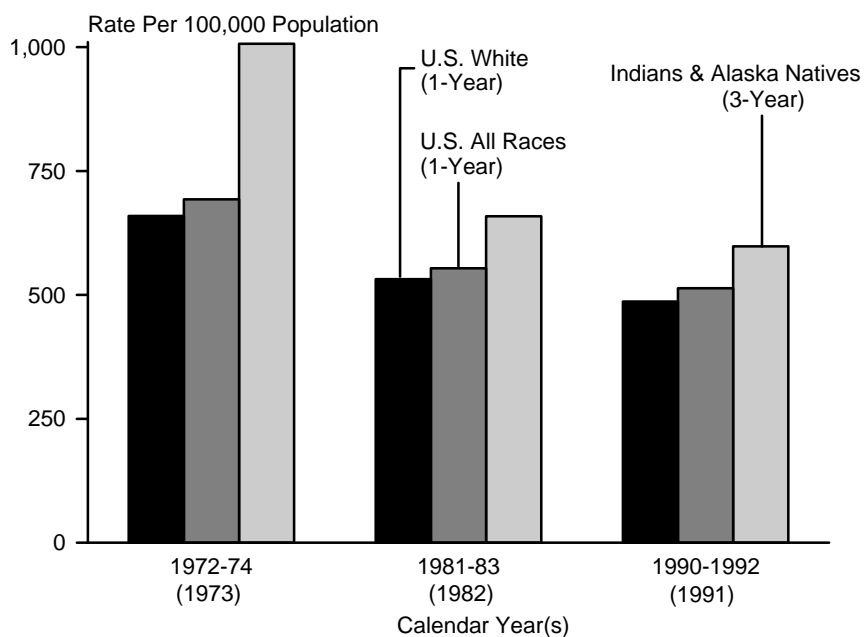


Chart 4.35***Age-Adjusted Mortality Rate***

The age-adjusted mortality rate (all causes) for American Indians and Alaska Natives has decreased 41 percent from 1972-1974 (1,007.4 per 100,000 population) to 1990-1992 (598.1). From 1973 to 1991, the U.S. All Races rate decreased 26 percent (692.9 to 513.7) as did the White rate (659.3 to 486.8).

**Table 4.33*****Overall Measures of Indian Health***

IHS Service Area Population Compared with the U.S. All Races and White Populations

	Life Expectancy At Birth (Years)	Years of Productive Life Lost (Rate per 1,000 Population)	Age-Adjusted Mortality Rate (per 100,000 Population)
IHS Service Area:			
1990-1992	73.5	83.0	598.1
1981-1983	71.3	108.1	658.7
1972-1974	61.0	188.3	1,007.4
U.S. All Races:			
1991	75.5	55.6	513.7
1982	74.5	59.0	553.8
1973	71.4	78.9	692.9
U.S. White:			
1991	76.3	49.9	486.8
1982	75.1	55.1	531.8
1973	72.2	70.8	659.3
RATIO: IHS to U.S. All Races:			
1990-1992(1991)	0.97	1.49	1.16
1981-1983(1982)	0.96	1.83	1.19
1972-1974(1973)	0.85	2.39	1.45
RATIO: IHS to U.S. White:			
1990-1992(1991)	0.96	1.66	1.23
1981-1983(1982)	0.95	1.96	1.24
1972-1974(1973)	0.84	2.66	1.53

Chart 4.36
*Indian Health Service
Program Accomplishments
Since 1973*

The Indian Health Service maternal and infant mortality review committees have helped to reduce the infant mortality rate 58 percent and the maternal mortality rate 68 percent since 1972-1974. Likewise, the Indian Health Service tuberculosis control program has helped to reduce the age-adjusted tuberculosis mortality rate 79 percent.

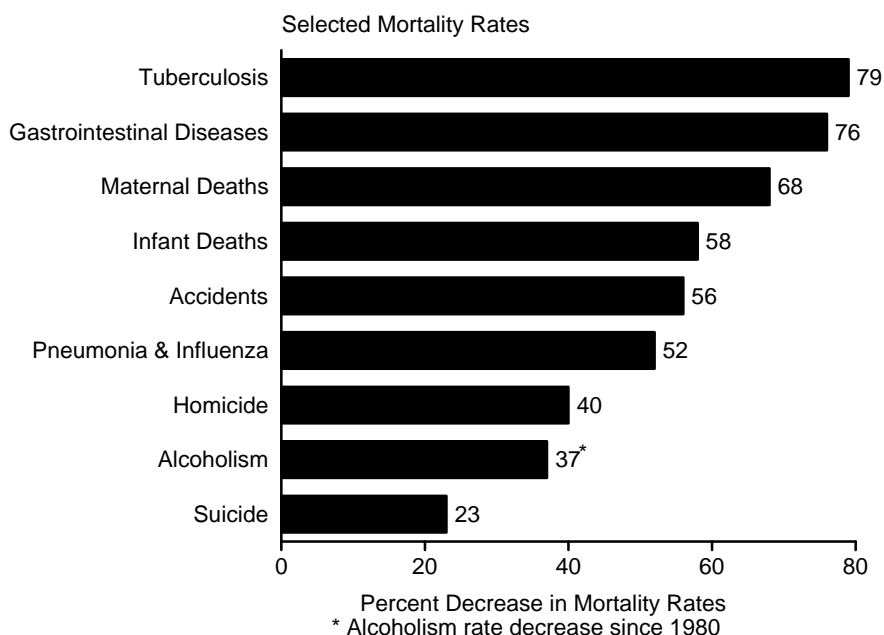


Table 4.36
Program Accomplishments

IHS Service Area

Health Improvements	CYs 1972-1974 Rate	CYs 1990-1992 Rate	Percent Decrease
Death Rates:			
Infant ¹	22.2	9.4	58
Maternal ²	27.7	8.9	68
Pneumonia and influenza ³	40.8	19.7	52
Tuberculosis, all forms ³	10.5	2.2	79
Gastrointestinal diseases ³	6.2	1.5	76
Accidents ³	188.0	83.2	56
Suicide ³	21.0	16.2	23
Homicide ³	24.3	14.6	40
Alcoholism ³	⁴ 59.0	37.2	37

¹ Rate per 1,000 live births.

² Rate per 100,000 live births.

³ Age-adjusted rate per 100,000 population.

⁴ 1979-81 age-adjusted alcoholism mortality rate, since specific mortality codes currently used to identify alcoholism deaths were not in use prior to 1979.